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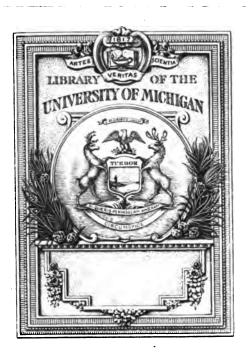
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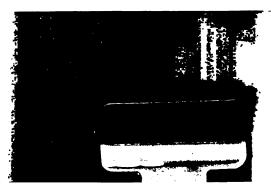
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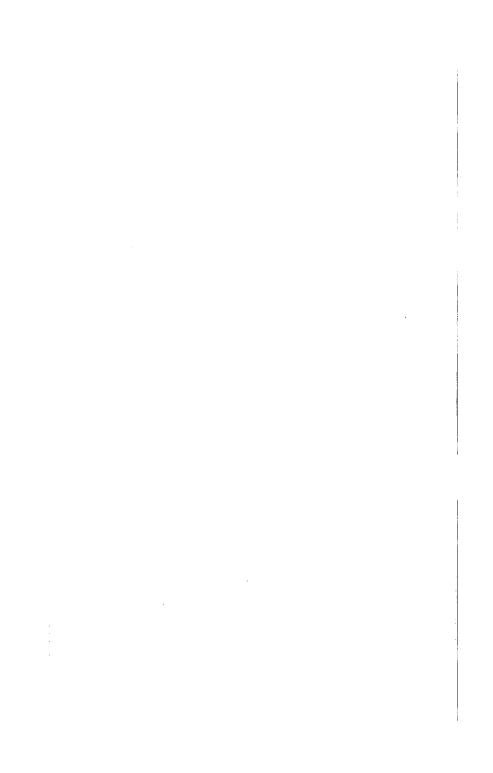
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RELIGION AND SCIENCE.

A

SERIES OF SUNDAY LECTURES

ON THE .

RELATION OF NATURAL AND REVEALED RELIGION, OR THE TRUTHS REVEALED IN NATURE AND SCRIPTURE.

BY

JOSEPH LE CONTE,

PROFESSOR OF GEOLOGY AND NATURAL HISTORY IN THE UNIVERSITY OF CALIFORNIA.

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PREFACE.

THE series of lectures contained in this little volume is the result of an earnest attempt to reconcile the truths revealed in Scripture with those revealed in Nature, by one who has, all his active life, been a reverent student of both. series grew up gradually from very humble origin, viz., a Bible-class of young men, my own pupils in science in the University of South Carolina. The class becoming very large, it was found necessary to change the form of instruction; and thus the familiar talk of the Bible-class assumed the form of unwritten Sunday lectures. On coming to this coast, I was induced to repeat them here to a small class. Some gentlemen who heard them thought that they were worthy of wider circulation, as meeting the wants of many thinking men in the present day, and therefore proposed that, if

I would again repeat them to a larger audience, they would have them literally reported. The form now presented is the result of these reports. I have only made verbal alterations and corrected some infelicities and redundancies of style consequent upon extemporaneous delivery. But for the kind offer of these gentlemen I am sure these lectures would never have been published at all, for the labor of writing them was far more than I had time to undertake.

I have two apologies to make: First, I fear the style of these lectures may still retain some of the looseness and infelicity of extemporaneous delivery, but I hope this may be compensated for by the freedom, naturalness, and directness, which give interest to this mode of delivery; again, my studies have been chiefly scientific, and not metaphysical, and yet I unavoidably touch on many metaphysical points. It may be that, to those profoundly versed in metaphysics, my handling of these subjects may seem crude, but I hope that this also may be compensated for by the fact that they are presented from a side not usually noticed by theological or metaphysical writers.

The series is by no means complete, many important subjects having been omitted because I

felt unable to present them in a satisfactory manner from a scientific point of view; but, as far as I have gone, I hope the reader will acknowledge that I have treated the subjects in the true rational spirit.

I fear, also, I may not entirely please either the mere scientist on the one hand or the mere theologian on the other, but I have no apology to make for this. Perhaps my views may be all the more rational on that very account.

J. LE C.

OAKLAND, Cal., January, 1873.

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RELIGION AND SCIENCE.

LECTURE L

PERSONALITY OF DEITY.

My Christian Friends: At the urgent request of a number of gentlemen, whose judgment I highly respect, I have been induced to commence this evening a series of lectures on "The relation of natural and revealed religion;" or, as I might otherwise express it, "The doctrines of Christian belief viewed from the stand-point of science." I wish to compare the two divine books, and to show that the God revealed in the one is the same as the God revealed in the other.

I find sufficient justification for this course of lectures in the existence of a constantly-growing feeling among intelligent people, that there is an irreconcilable antagonism between science and revelation; and that the unbiassed and earnest study of the former is inconsistent with a belief in the latter.

The outline of the course will be as follows: First, I will speak of the *Personality* of Deity; then the *Spiritual Nature* of Deity; and then the *Attributes* of this Personal Spirit. I will try to show that on all these points the teachings of Scripture are confirmed

by Nature. I will then speak of the *Modes of Divine Existence* as revealed in Scripture, and show that, if not distinctly revealed in Nature, they are at least perfectly rational from this point of view. I will then take up the *History of Creation* as revealed in the two books, and show that they are in general accordance with each other. Last of all, I expect to take up the subject of *Man*, the last and crowning act of creation according to both books, and attempt to show in what consists his essential nature; what are his *relations to Nature and to God*, and the duties consequent upon these relations.

And now I wish you to understand, once for all, that I stand on the same platform as every one of you; that I do not appear before you as one having authority to teach you upon these high subjects: I do not come having a commission in my hand, except such a commission as every one holds to exert all his influence on the side of truth and virtue. I simply present here the thoughts of one who has thought intensely, if not profoundly, and felt still more intensely, upon subjects which must stir the heart of every one in this audience—subjects of such vital importance that, in comparison, all others sink into insignificance; the thoughts of one who has all his life sought with passionate ardor the truth revealed in the one book, but who clings no less passionately to the hopes revealed in the other.

Perhaps some of you will think that this very position puts me in a condition of prejudice; that a condition of intellectual indifferency is absolutely necessary for sound and fair judgment. I know many think so. On the contrary, I assert that intense interest and love

of the truths revealed in both books is the only condition of a rational view of their mutual relations.

Not many Sundays ago I heard an eloquent minister. standing in this place, say, "It is impossible to know a man unless you first love him." There is a profound truth in this remark. You cannot be a wise philanthropist unless you deeply sympathize with human nature, unless you love your fellow-men. You cannot understand the character of children unless you deeply sympathize with them and love them. You cannot understand your friend unless you first love him. ency shuts the door of the mind as well as of the heart, Hate not only shuts but double locks it, and throws away the key. Only Love can open it. Now, what is true of persons is no less true of subjects. It is impossible to judge fairly of any theory, of any philosophy, of any subject, unless you are deeply interested, unless you. deeply sympathize with and love its spirit. This is true even in the lower departments of thought, but more and more true as the subjects become more complex. As we rise higher and higher we find it more and more necessary to bring the affections to the work, until, in the highest of all, in religious subjects the language of Scripture is literally true, we understand with the heart more than with the head. I repeat, then, that it is impossible to judge fairly and. appreciate thoroughly the mutual relations of these two revelations unless we deeply sympathize with and love the truths contained in both.

After this introduction, defining my position, I an-

¹ The course was delivered in the lecture-room of the Independent Presbyterian Church of Oakland, California.

nounce as the subject of this my first lecture, as well as of one or two following, the "Personality of Deity as revealed in Nature."

Theism, or a belief in God or in gods, or in a supernatural agency of some kind controlling the phenomena around us, is the fundamental basis and condition of all religion, and is therefore universal, necessary, and intuitive. I will not, therefore, attempt to bring forward any proof of that which lies back of all proof, and is already more certain than any thing can be made by any process of reasoning. The ground of this belief lies in the very nature of man; it is the very foundation and ground-work of reason. It is this and this only which gives significance to Nature; without it, neither religion, nor science, nor indeed human life, would be possible. For, observe what is the characteristic of man in his relation to external Nature. To the brute the phenomena of Nature are nothing but sensuous phenomena; but man, just in proportion as he uses his human faculties, instinctively ascends from the phenomena to their cause. This is inevitable by a law of our nature. but the process of ascent is different for the cultured and uncultured races. The uncultured man, when a phenomenon occurs, the cause of which is not immediately perceived, passes by one step from the sensuous phenomenon to the first cause; while the cultured and especially the scientific man passes from the sensuous phenomenon through a chain of secondary causes to the first cause. This region of second causes, and this only, is the domain of science. Science may, in fact, be defined as the study of the modes of operation of the first cause.

It is evident, therefore, that the recognition of second causes cannot preclude the idea of the existence If, in tracing the chain of causes upward, we stop at any cause, or force, or principle, that force or principle becomes for us God, since it is the efficient agent controlling the phenomena of the universe. Thus, Theism is necessary, intuitive, and therefore universal. We cannot get rid of it if we would. Push it out, as many do, at the front-door, and it comes in again, perhaps unrecognized, at the back-door. Turn it out in its nobler forms as revealed in Scripture, and it comes in again in its ignoble forms, it may be as magnetism, electricity, or gravity, or some other supposed efficient agent controlling Nature. In some form, noble or ignoble, it will become a guest in the human heart. I therefore repeat, Theism neither requires nor admits of proof.

But in these latter times there is a strong tendency for Theism to take the form of Pantheism, and thereby religious belief is robbed of all its power over the human heart. It becomes necessary, therefore, for me to attempt to show, not the existence, indeed, but the personality of Deity. If I were lecturing to an unlettered audience, this would not be necessary, for the mind naturally conceives of God as a person. But, among a certain class of cultivated minds, and especially among scientific men, there is a growing sentiment, sometimes openly expressed, sometimes only vaguely felt, that what we call God is only a universal, all-pervading principle animating Nature—a general principle of evolution—an unconscious, impersonal life-force under which the whole cosmos slowly develops. Now,

this form of Theism may possibly satisfy the demands of a purely speculative philosophy, but cannot satisfy the cravings of the human heart. For practical religion—for a religion which connects itself with morality, and influences human life, which shall make us better men and women, which shall be the agent of human progress—we must have more than this, we must have a personal Deity; not indeed a material form, but a personal Will and Intelligence, a Father of our spirits, one to whom we come in our ignorance and darkness for guidance and light, in our weakness for help, in our hungerings after spiritual food for daily bread; into whose image by daily communion we may be more and more transfigured; by steadfast upward gazing into whose face we may be drawn higher and higher.

Now, it is precisely such a personal Being, which as you all know is revealed in Scripture, underlying in fact every line of its language; it is such a personal Deity which, as I am convinced, is revealed in Nature also, and underlies all her language.

The argument for the personality of Deity is derived from the evidences of intelligent contrivance and design in Nature; or the adjustment of parts for a definite and an intelligible purpose. It is usually called "the argument from design." The force of this argument is felt at once intuitively by all minds, and its effect is irresistible and overwhelming to every plain, honest mind, unplagued by metaphysical subtleties. Even in minds thus troubled the effect is still intuitive and irresistible in all cases except in a work of Nature, i. e., of God.

But some will say, "The very object of science is to

destroy popular intuitions." There cannot be a greater mistake. There are two great functions of science. One is the discovery of new truth; the other and far the more characteristic is to give clear and perfect form to old truth—to give rational form to the vague intuitions of the popular mind-to winnow out the chaff from the grain, separate the dross from the gold. This it does by means of its admirable methods. As is the eye among the sense-organs, so is science among the means of acquiring knowledge: as the vague perceptions of the external world received through the other senses are changed into clear, distinct, definite knowledge only through the delicately-adjusted mechanism of the eye; even so the vague intuitions of the popular mind and even of philosophic genius take clear, distinct. and permanent form only through the exquisitely-delicate methods and processes of science. This, I repeat. is the more characteristic function of science. The discovery of new truth does not seem to come by any characteristic method. When a great truth is discovered by scientific genius, it seems to come suddenly, like a revelation. It seems to be by the same faculty of intuition which is common to all minds, but which in its highest forms we call genius. But the characteristic work of science is the subsequent verification of that truth, and the putting it into clear, exact, permanent shape. In other words, intuition guarries the blockshuge, shapeless masses unfit for building-purposes; science hews and shapes them in proper forms and fits them into the edifice. This is the characteristic work of science—this constructive mason-work, by which knowledge is gradually built up into a beautiful edifice.

Now, in these latter times, there has been so much of this stone-cutting, the clink of the scientific hammer and chiscl so deafens our ears, that the function of the quarrier is in danger of being underrated, if not entirely overlooked. Few appreciate how many of the greatest blocks of truth have been quarried by popular and philosophic intuitions. Let us, then, learn to respect popular intuitions. The intuitions of the human heart and the human mind, when strong and universal, are always true, although the form of truth may be vague and crude. The function of science is not to destroy these, but to shape them.

Thus much I have thought it necessary to say concerning the nature of the argument from design, because it has been the fashion to speak of it with contempt as "the carpenter's theory of the universe."

I said the argument from design, to the unbiassed mind, is conclusive. Take an example: I dig in certain gravel strata in this vicinity, and find flint implements adapted for purposes of war or industry on the one hand, or for ornamentation on the other. Does any one for a moment doubt that these are the work of intelligence? Certainly not. Observe, then, from the example given, that the argument from design has two branches, viz., design for use and design for beauty. The old natural theology was founded almost entirely upon design for use. I will take up this branch first, and give the argument very briefly, somewhat in the form in which it is usually presented, but varying it to suit my own purposes.

I am walking upon a heath in an uninhabited desert island: I find lying upon the ground a watch. I have

never seen nor heard of a watch before. I have not the remotest idea what it is; but I examine it patiently and thoroughly. Having studied it perhaps for weeks or months, perhaps for years, I at last understand the nature and design of the instrument. I observe wheel locked in wheel, each influencing the other, and all controlled by the main-spring, and regulated by the balance-wheel. I observe that the effect and the evident design of all this is, to make the hands move around and mark time upon the graduated face. Now, it may take a long time and much patient study, and a very considerable amount of intelligence, to understand all this. But, if I do understand it, the conclusion is absolutely irresistible that some person made the watch, and put it where I found it.

Now, suppose a metaphysical objector present on the occasion should say, "No, the watch may not have been made at all: it existed there from eternity; it had no intelligent contriver at all, because it had no beginning." The answer to this is obvious. only by the greatest effort of my intellect that I have been able to understand the beautiful contrivance, the delicate adjustment of parts for a purpose. What has taken me so long, and required so much intellectual labor to understand, must have been contrived by a still greater intellect than mine." Observe, the question is not how long the watch may have lain on the heath, but of something which I now see in the watch. It is not a question of the origin of the material of the watch, but of the use of that material. It is not a question of creation, but of arrangement. It is not a question of the exercise of power, but of the exercise

of intelligence. It is not a question of the origin of matter, but of the origin of contrivance—a thing purely intellectual, and not material—a thing which can be perceived only by intelligence, and, therefore, could have originated only through the exercise of similar intelligence.

Now, such a watch is the solar system, with its sun, planets, and moons; infinitely more beautiful, more complex, more delicately adjusted, than any human work-wheel within wheel, each influencing the other, and all controlled by the central sun, and marking time with the utmost exactness upon the dial-plate of heaven. Now, observe: it matters not when this was made, or how it was made, or where the materials came from, out of which it was made. All this is entirely foreign to the question. But here is something, not material, but intellectual, which I perceive, viz., the intelligent arrangement for a purpose, the contrivance. The greatest minds upon this earth have been studying this contrivance for two thousand years without exhausting it. We are still studying, and every year the wonderfulness of this contrivance grows greater. I ask, then, if we admit intelligence—personal intelligence in the human work, how shall we deny it in the Divine?

But, again: Suppose, upon second and closer examination of the watch, I find within it, what I did not observe before, another exquisitely-beautiful contrivance for making watches—a watch-making mechanism. What would be the natural effect of this new discovery? Evidently only to increase immensely my admiration of the wonderful intelligence which contrived it.

But here comes the metaphysical objector again. He says: "Ah! I see now I was wrong in thinking that the watch was eternal, and therefore had no beginning. Now I perceive that it was made by another watch like itself, and had no intelligent contriver; and the previous watch was itself made by still another, and that by another, and so on to infinity. There never was a first watch to be contrived." Now, the answer to this also is very obvious: "The question is not of a first watch, or of any other watch, but of this very one. Neither is the question of any thing material, but simply of an intellectual something which I see in this very watch, viz., its contrivance. I will not be driven from this which I clearly understand by any metaphysical subtleties which I do not understand. It is impossible to believe that this wonderful intellectual contrivance should have originated except by the use of intelligence."

A watch is an instrument showing much personal intelligence in its construction. But suppose I found a watch-making machine—a machine which, being wound up, would make and wind up watches; this, of course, is evidence of a much higher intelligence. Suppose I put the direct act of constructive intelligence still one step back, and have a machine for making watch-making machines. Surely this is only evidence of still higher order of intelligence. Now, it may be regarded as an axiom that whatever is true at every step up to a limit, is true at the limit also; whatever is true at every step up to infinity, is true of infinity also; whatever is true at every step conceivable to the mind, is true absolutely and without limit. Intel-

ligence is necessary in the direct construction of an individual watch or machine; it is no less necessary if direct action be one degree removed, two degrees removed, three degrees removed, a thousand degrees, a million degrees removed, or even if removed to infinity. The argument remains precisely the same, only the degree of intelligence grows more and more wonderful.

Now, such a watch is this our human body—more complex, more wonderful, more delicately adjusted, than any conceivable human work. It winds up and renews its strength every day; repairs itself, and finally reproduces itself ad infinitum; yes, so far as the study of present Nature teaches us, reproduces itself in an infinite series in the past and in the future. Again I ask, If we admit personal intelligence in the human work, how shall we deny it in the work of Nature?

But I am well aware that the plain, honest, straightforward mind, unaccustomed to metaphysical subtleties, is confused and distressed by these objections, founded on infinite series and eternal existence. longs to see the contriving hand introduced, he longs to know the beginning of some contrivance. contrivances of Nature were less wonderful, more human, we could believe without difficulty. trivance so infinite, so superhuman, so inconceivablemay it not be something else than contrivance? Now, just here it seems to me geology helps us, at least a little; at least removes the difficulty, if such it may be called, some steps farther back. It is an axiom in geology that organic forms, organic contrivances, whether individuals, species, genera, or families, have a finite duration. Species commence to exist, they con-

tinue by reproduction a certain length of time, and they cease to exist. Another species (or style of contrivance) commences, continues by reproduction, and passes away. There is no infinite series of similar con-We are indebted to geology alone for the demonstration of this great truth. Geology demonstrates a beginning for man, a beginning for organic species, genera, families, a beginning for the organic kingdom, a beginning for the cosmos itself. We have vearned to know when the watch was made: Geology comes forward and says, "Here, at this very point of time; and here, and here, are the dates of other watches of different styles." Thus while Metaphysics has been disputing as to whether watches are made, or whether they are eternal, Geology comes forward and tells us the date of manufacture. so, but she knew the heath before there was any watch on it; not only so, but she knows of other heaths on which other styles of watches are now lying unknown to any metaphysician. Thus, while Metaphysics has been trying in vain to decide whether or not watches were made or could have been made at all, Geology comes forward and gives the whole history of the various styles of watches.

Now, I know full well that there are many persons who will ask: "Is not the force of this argument from geology broken by the latest developments of science? Is it not now believed by many scientists that species did not originate suddenly, but by gradual infinitesimal changes through successive generations?" I answer, I simply give you the facts as they are given me by geology. Geology demonstrates a beginning to

every style of contrivance; as to the suddenness or slowness of that beginning, and the process by which it was determined, we know nothing with certainty. Yet the present condition of geological evidence is undoubtedly in favor of some degree of suddenness—is against infinite gradations. The evidence may be meagre, some think it is meagre, though it seems to me that, in some cases at least, it is very abundant. But, whether meagre or not, it is nearly all the evidence we have. Observe: the question is not, how species could have been introduced, or ought to have been introduced, or must have been introduced; it is a simple question of how they were introduced. It is not a question of speculative philosophy; it is a simple question of history. And, as a question of history, there is no witness upon the stand except Geology. In comparison with her evidence, all other evidence ought to be ruled out of court. Her evidence and hers alone must eventually settle this question. Now, the evidence of Geology, to-day, is that species seem to come in suddenly and in full perfection, remain substantially unchanged during the term of their existence and pass away in full perfection. Other species take their place apparently by substitution, not by transmutation.

But you will ask me: "Do you, then, reject the doctrine of evolution? Do you accept the creation of species directly and without secondary agencies and processes?" I answer, No! Science knows nothing of phenomena which do not take place by secondary causes and processes. She does not deny such occurrence, for true Science is not dogmatic; and she knows

full well that, tracing up phenomena from cause to cause, we must reach somewhere the more direct agency of a First Cause. But any phenomenon referred to direct agency of the First Cause is immediately put beyond the domain of Science. The domain of Science is secondary causes and processes—is all that lies between the phenomenon, the object of sense, and the First Cause, the object of faith. Science passes from sensible phenomena to immediate causes, from these to other higher causes, and thus by a continuous chain she rises higher and still higher until she approaches the Great First Cause, until she stands before the very throne of God Himself. But there she doffs her robes, she lays down her sceptre, and veils her face.

It is evident, therefore, that, however species were introduced, whether suddenly or gradually, it is the duty of science ever to strive to understand the means and processes by which species originated. This is her only domain; she would belie her character and her mission if she did not.

Now, of the various conceivable secondary causes and processes by means of some of which we must believe species originated, by far the most probable is certainly that of *evolution* from other species. This, be it observed, is by no means proved; but if species originated by secondary causes at all (and no other view is scientific), surely this is far the most probable. But, admitting evolution as probable, there still remain the questions of the cause and the mode of evolution.

First, as to the cause of the origin of new forms, whether it be (a) the pressure of external conditions modifying organic structure and the modification trans-

mitted by inheritance, and the same process continued from generation to generation, as supposed by some; or whether it be (b) improvement of organs by use and the improvement transmitted by inheritance to be again improved upon, and so on, as others suppose; or whether it be (c) by divergent variation of offspring and survival of the fittest in the sharp struggle for life, as supposed by Darwin; or whether, admitting all these as factors of change, there be not (d) a fourth unknown factor far more important than all; these are questions yet to be solved by science. My own very strong conviction, however (and I think many others are coming to the same conclusion), is that no theory of evolution yet proposed explains the origin of species, that the factors mentioned above (a, b, c) may produce varieties, but not species, much less genera, orders, and classes; that the great factor of change and the real cause of evolution is still unknown. Evolution may be the universal formal law of the universe of Time, but the cause of this law is yet undiscovered. The Time universe may have its Keplers, but its Newton has not vet arrived.

Again, as to the mode of origin of new species. Is it by uniform rate of change and by gradations so insensible that, if we only had all the links, there would be no such thing as species at all, or is it by more or less paroxysmal change? This question is yet undecided; nevertheless, as I have already said, all the real evidence which we have is in favor of paroxysmal change. It may be meagre, but it is all we have.

Most naturalists seem to think that sudden change is inconsistent with the idea of evolution. It may, in-

deed, be inconsistent with any theory now before the scientific world; but this only shows that we have not yet a true theory of evolution. But others say the constancy of Nature's laws necessitates change by insensible gradations. "Nature," they say, "never goes by leaps," On the contrary, although laws and forces are constant, phenomena almost always change by Meteorological phenomena, such as storms and lightning-geological phenomena, such as earthquakes and volcanoes, are paroxysmal. Even embryonic development, the very type of all evolution, is paroxysmal always in some of its steps and in many animals in several of its steps. Is it, then, inconceivable or contrary to the known analogies of Nature that the evolution of the organic kingdom should also have its periods of paroxysmal change? On the contrary, it seems to me far more probable that in the evolution of the organic kingdom, as in the evolution of the earth, in the evolution of society, in the evolution of the egg, in fact, as in all evolution, there have been periods of comparative quiet and periods of rapid change. How rapid these changes have been can only be determined by further observations. All I wish to insist on is. that the mind should not be closed against sudden or paroxysmal change by any idea that such change is inconsistent with evolution by secondary causes.

Let me insist, however, that it can make no difference, so far as the argument for design is concerned, whether there be evolution or not; or whether, in case of evolution, the evolutionary change be paroxysmal or uniform. The existence of contrivance is one thing, the mode by which the contrivance is effected is

quite another thing. The sudden appearance of species, with all their admirable contrivance complete, might be a relief to our finite minds—might strengthen the wavering faith of some, but cannot affect the real argument in any way.

Thus, then, you will observe that skepticism takes its first refuge in the past eternity of existing contrivances, or else, in the case of organisms, in the eternity of the species. Driven from this by geology, it takes its next refuge in the eternity of the organic kingdom. Driven again from this, it takes its next refuge in the eternity of the cosmos. Driven from this also, as it has been, it takes its last refuge beyond the domain of Science, in the eternity of matter and material forces. Thus in every case it seeks refuge in our ignorance—it flies ever before the light of Science, and finds safety and rest only beyond her domain.

LECTURE II.

PERSONALITY OF DEITY .- CONTRIVANCE FOR USE.

MY CHRISTIAN FRIENDS: In my last lecture I attempted to show the evidences of design, and therefore of personal intelligence, in the general constitution of the universe, and especially in the organization of the human body. I attempted to show, further, that it makes no difference how the materials from which these were made originated, or whether they ever originated at all, since the evidence of design is shown only in the use of these materials for a definite purpose, precisely as man uses them for definite purposes.

Again, I attempted to show that it makes no difference whether the structural contrivance was brought about instantaneously by what we usually call a creative act, or whether it was brought about gradually by means of secondary agencies, and by a slow process of evolution. I insist on this, again, because there are many persons who seem to think that, whenever we trace any adjustment or contrivance to secondary agencies, natural laws, and gradual processes, we thereby put it beyond the category of personal intelligence. There are many religious persons who seem to fear, and

many skeptical persons who eagerly embrace the nebular hypothesis—which supposes that the whole universe was gradually developed and arranged from a diffused nebulous matter by the laws and forces of matter—because they think this view puts the admirable arrangement of the universe beyond the pale of personal intelligence. There are many religious persons who fear, and many skeptics who embrace the evolution hypothesis—which attempts to account for the origin of species by natural laws—because they think this view places the admirable contrivances of the animal body out of the pale of personal intelligence.

Now, nothing, it seems to me, can be more unfounded than these fears and these hopes. These hypotheses, if true, only express the modes of operation of personal intelligence. As already explained, the domain of science is the modes of operation of the First Cause, and, if the results show personal intelligence, then is it the modes of operation of Personal Intelligence. Whether the nebular hypothesis be true or not, science must ever strive to find out the means and processes by which worlds gradually came into being and were arranged as we now find them. Whether any form of evolution hypothesis which now exists be true or not, science must ever strive to discover the secondary agencies and the processes by which new organic forms appear on the earth. But science cannot touch the argument for design; it only shows the modes by which design is car-Science cannot touch the evidences of personal intelligence; it only shows the modes of operation of that personal intelligence. Science can never disprove the existence of a personal Deity; its only

function is to enhance our ideas as to the nature of that Deity. Science can never touch the grounds of a true religion; its whole function is to give more rational form and more rational ground to our religious beliefs.

But the human heart demands not only a personal Deity, but a personal Deity like ourselves-like our better selves—a person with whom we can sympathize, whom we may worship not only with fear, but also with reverence and love. Our object this evening, therefore, is to show in Nature not only the evidence of personal intelligence, but that the operations of this intelligence are like the operations of our own intelligence, and that man as regards his intellect is made literally, as the Scripture says, in the image of God. In order to do this, I will take a human work of art and compare it with a Divine work of art, and show their For this purpose I select the human eye and the photographic camera. I select these because they are wonderfully alike both in design and in the mode of carrying out that design, and because, having all my life made a special study of the structure of the eye and the nature of vision, I feel that I can carry the comparison further than it is usually carried.

For many centuries the beautiful structural contrivance of the eye has been the theme of admiration of the theologian, as well as of the student of Nature; but the subject, so far from being exhausted, acquires new interest with every advance in the physiology of the eye, and every improvement in the construction of optical instruments. I wish, therefore, now, in the light of the latest developments of science, to compare

this masterpiece of Divine art with that masterpiece of human art, the photographic camera.

Observe, then, that the design of the two instruments is precisely the same, viz., to form a perfect image on a screen properly placed. The means of carrying out this design is also wonderfully similar in the two cases, as I now proceed to show.

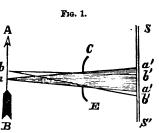
I pass over certain minor points, such as the care-ful covering of these delicate instruments, to prevent injury when not in use; the frequent wiping of them, to keep them perfectly clear and transparent and ready for use; the contrivance for rapid movement in all directions, so as to turn full upon the object to be imaged. In all these respects the infinite superiority of the eye is perfectly obvious. I come at once, then, to the main points of the comparison:

1. The ordinary camera, as you all know, is a small, dark chamber, open to the light only in front, with a screen in the back part, which must be properly placed. The interior of this dark chamber is entirely lined with lamp-black. The object of this is to quench, and thus prevent reflection of, any light which may strike the sides of the chamber, so that no light can reach the screen except that which comes directly from the object to be imaged; in other words, the object is, to prevent the reverberation of light within the chamber, which would spoil the clearness of the image. the human eye also is a very small, dark chamber, open to the light only in front, with a screen (the retina) properly placed in the back part, and the whole lined with a black, absorbing substance which completely prevents reflection or reverberation of light within the

chamber; no light can reach the retinal screen except that which comes directly from the object.

2. I said, the chamber in both cases is open in front; but an ordinary hole through which light may enter will not answer the purposes of either the camera or the eye, because it is impossible to form a perfect image in that way. There are two necessary requisites. of a perfect image: first, it must be perfectly distinct; second, it must be sufficiently bright. To attain distinctness, it is necessary that the light coming from each point of the object should be gathered and should fall only upon a corresponding point of the image; so that there shall be no mixing, on the image, of light from different points of the object. To attain brightness, a sufficient amount of light from the object must fall on the image. Now, if we have a simple hole, observe the difficulty: In proportion as we increase the size of the hole, so as to let in more light, and thus increase the brightness, in that very proportion do we necessarily decrease the distinctness of the image. For the divergent cone of light from any radiant point (a) of the

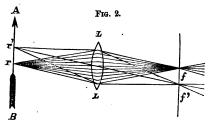
object (AB), as it passes through the hole and falls upon the screen (SS'), must form there a circle of light, a' a', larger than the hole. The light from another contiguous point, b, passes through the same hole, spreads



out into a similar circle, b' b', and these two circles overlap, and the light from different radiants, a and b,

mix with each other. Thus, the light from every radiant point of the object mixes with light from contiguous radiant points, and therefore no clear, distinct image is possible. On the other hand, if we decrease the size of the hole, the distinctness becomes greater, it is true, because the overlapping circles of light become smaller; but the brightness becomes less and less in the same proportion. By means of a pin-hole we can make a tolerably distinct image of external objects within a camera, but the image is also very faint. If we attempt to make the image still more distinct by making the hole still smaller, it becomes fainter and fainter, until, at the moment when it becomes quite distinct, its brightness is entirely gone, it disappears altogether.

Now, a *lens* is an exquisite instrument for accomplishing both of these results. A lens properly constructed has the really wonderful property of taking all the light radiating from a given point, r, which falls



upon its surface, and by refraction gathering it and guiding it with the greatest precision to a particular point, f.

called the *focus*. The same is true of the light from *every* radiant point, r'; it is carried to its corresponding focal point, f'. Now, every object may be regarded as made up of an infinite number of radiant points. The rays from each one of these radiant points are gathered, and as it were sifted out and disentangled from all

others, and carried each to its own place on the image. Thus, for every radiant point of the object, there is a corresponding focal point on the image; and, as the object is made up of an infinite number of radiant points, so the image is made up of an infinite number of corresponding focal points, and the image is therefore at the same time perfectly distinct and very bright.

Now, it is this wonderful instrument which is used both in the camera and in the eye. Without their lenses, neither the camera nor the eye could possibly produce a perfect image.

3. I have said, "a lens properly constructed" has the property of making a perfect image. is no easy matter to construct a proper lens. are certain defects in lenses, the removal of which has been justly regarded among the greatest triumphs of science and art. The first of these is called chromatism. I will illustrate it in a simple way: If you take an ordinary prism, and allow light to shine through it, the variously-colored rays of which white light is composed are separated from each other, and we have the colors of the rainbow. This is called dispersion of light. If we look through the prism, we find all objects are more or less fringed with these colors. reason is plain: light passing through a prism is bent from its course-refracted. If all the colors were refracted alike, the light would still be white; but some colors are refracted more than others, and the colors are therefore separated or dispersed. Now, the lens has the same property as the prism. The light passing through a lens is always dispersed by unequal refraction of the different colors: the more refracted rays

are brought to focus nearer the lens, the less refracted farther off. The light from each radiant point is not all brought, therefore, as it ought to be, to the same focal point. The image is, therefore, confused in every part, by the mixing of light from contiguous radiants, and at the same time is fringed on the margins with colors.

. Now, how is this difficulty remedied in the best It is remedied by using two optical instruments? lenses, one convex and the other concave; but the convexity of the one is greater than the concavity of the other, so that when together the combination still acts as a convex lens. Again, the materials of which the two lenses are made are different, and have different dispersive powers—the dispersive power of the material of the concave lens being greater than the dispersive power of the material of the convex lens. Now, convex and concave lenses act upon light in opposite ways, both as regards dispersion and refraction: they tend, therefore, to counteract each other. curvature of the two lenses and their material are so disposed; that the dispersion produced by the convex lens is entirely counteracted by the contrary dispersion of the concave lens, but the refraction produced by the one is not overcome by the contrary refraction of the The combination is still a convex-refracting lens, but not a dispersing lens. By this beautiful contrivance the dispersion of light, or chromatism, may be entirely removed.

Now, precisely the same method is adopted in the eye. The eye has its three lenses, the *crystalline* lens, the *aqueous* lens, and the *vitreous* lens—the first two convex and the last concave—consisting of materials

of different refractive and dispersive powers, so related to each other that their combination completely corrects the chromatism which otherwise must have disturbed the clearness of vision.

4. But there is another defect in lenses which is still more difficult to remedy. It is called spherical aberration. I will endeavor to explain. The simplest form of lens, and by far the easiest to make, is one whose curvature is spherical. But, in such a lens, the light which falls on the marginal portions is refracted a little too much, and that which passes through the central portions is not refracted quite enough. The result is, that the marginal rays are brought to focus nearer the lens, and the central rays farther off: and therefore the condition of distinctness, viz., that all the light from each radiant is brought to the same focus, is not fulfilled, and the image therefore is confused.

Now, how is this error corrected in the best optical instruments? We have seen that the margin of the lens refracts too much and the central portions too little. To correct, therefore, we must decrease the refraction of the marginal portions, or increase that of the central portion. This may be done in either of two ways: either by increasing the curvature of the central part so as to give the lens a curvature like that of the end of an egg; or else by making the density and therefore the refractive power of the material of the lens greater in the central part. Now, in the camera and other optical instruments we use the former method; and it is accounted one of the greatest triumphs of mathematics to have calculated, and of art to have made, the exact form necessary to correct this error.

Art has never succeeded in correcting the error by the second method. It is impossible to graduate the density of the material in the manner required.

It is apparently in this second way that the correction is made in the case of the eye. The crystalline lens consists of concentric layers, becoming less and less dense from the centre to the margin. Its curvature is probably also modified suitably for correction. But in whatever way it is corrected in the eye, whether by one or both of these methods, the fact of its correction is undoubted. The least want of correction would interfere fatally with the distinctness of the retinal image, and therefore of vision.

5. But there is another difficulty. We have said the screen must be appropriately placed. It must be so for this reason: the path of light-rays is perfectly straight; therefore, when the rays are refracted and collected by a lens they meet at the focus, cross one another, and again separate (as seen in Fig. 2) beyond that point.

Now, we want a perfect image on the screen, but the conditions of a perfect image exist only exactly at the focus. If the screen is short of that point, then the rays of light from each radiant are not yet brought together to a perfect point. If the screen is beyond that point, they have already crossed each other and again diverged. Evidently, then, we must have the screen exactly at the focus or point of crossing. You are all familiar with the fact that, in the camera, if the screen is not adjusted to the exact proper place, the image is blurred. We therefore carefully move it back and forth until, looking in from behind, we see the image sharp and distinct on the ground-glass screen. Now, if the place

of the image were precisely the same for objects at all distances, then we might fix the screen, whether in the camera or the eye, once and for all, in its proper place. But we find that, for objects at different distances, the place of the focal points or image is different. Commencing at a distance, as we move an object toward the lens, the image on the other side moves farther and farther away; as we carry the object away from the lens, the image approaches the lens. There must be some means of adjusting instruments for perfect images of objects at different distances. This is called focal adjustment.

Now, there are only two possible methods of accomplishing this adjustment: either the screen must be moved backward and forward, in proportion as the image moves, or else the screen may be fixed, and the lens changed and made more or less refractive, so as always to throw the image on the fixed screen. Both of these methods are used in optical instruments.-In the camera, in the spy-glass, and the opera-glass, and the telescope, we use the former, while in the microscope we use the latter. In the camera, for instance, by means of a screw we elongate or shorten the tube, increasing or decreasing the distance between the lens and the screen, until, looking in from behind, we see the image on the ground-glass screen is perfect. In the microscope, on the contrary, the position of the image is usually fixed. When, therefore, we bring the object nearer or carry it farther, we change the lens so as to throw the image on the same spot.

Now, how is this managed in the case of the eye? Until very recently it was believed (and you will find

it still so stated in most text-books) the method of adjustment used in the eye is that used in the camera; that is to say, in looking at near objects the eye is elongated and the screen carried farther back, while in looking at more distant objects the eye is shortened or flattened, and the screen brought farther forward. recent and beautiful investigations of Helmholtz, it has been now proved, however, that the mode of adjustment in the eye is rather like that of the microscope. This has been proved in the following way: By putting belladonna in the eye, the pupil may be enormously enlarged, so that we may without difficulty examine the whole interior of the eye. Now, by putting a lighted candle before the eye of a person thus treated, we see three images of the candle-flame in the eye, one by reflection from the anterior surface of the eye itself, one from the anterior surface of the crystalline lens, and one from the posterior surface of the crystalline lens. If, now, while examining these images, we direct the person to look at a very near object, it will be seen that the image formed by the anterior surface of the crystalline lens changes its shape and size in such wise as to show that the surface of this lens becomes more curved—the lens itself becomes thicker, more convex, and therefore more refractive.

In the eye, therefore, like the microscope, the change is in the lens, not in the length of the dark chamber. But observe the immense superiority of the eye. In the microscope, we take off one and put on another lens—we change lenses; in the eye, we change the form of the one lens. By slight change in the form of its lens the eye adapts itself with the utmost exactness for all

distances, from five inches to infinity. It defines perfectly at five inches, it defines also perfectly the sun or the moon. As, therefore, the microscope has its quarter-inch lens, its half-inch lens, its one inch, two inch, three inch, four inch lenses; so the eye changes its one lens and makes it a five-inch lens, a foot-lens, a twenty-foot lens, a mile-lens, a million-of-miles lens.

6. For the delicate purposes for which these two instruments are used, the light may be sometimes too strong. There must be some means of regulating the amount of light admitted, according to the work required. Now, this is done in the camera and in the microscope by means of diaphragms—opaque screens with holes of various sizes; so also in the eye we have the iris, a true diaphragm, i. e., an opaque screen with a hole, (the pupil) in the middle. But observe the superiority of the eye. In the camera, we change the diaphragm, and use one with larger or smaller hole; in the eye, there is a contractile diaphragm, which adjusts the size of the hole (pupil) with the utmost exactness, according to the wants of the eye.

Very recently Art has taken a lesson here, and, in acknowledged imitation of Nature, has made a diaphragm in which by means of a screw the opening may be adjusted to any size. But even this, as perfect and beautiful as it is, is still far inferior to what we find in the eye.

I have already pursued this comparison beyond what is found in text-books on natural theology; but it may be carried still further, and the further we carry it the more wonderful the resemblance becomes.

You will observe that I have spoken thus far only

of structural contrivance or beautiful mechanism, for the evident purpose of making an image; but, both in the eye and in the camera, the image itself is only a means to attain a higher end: in the camera to produce a photographic picture, in the eye to accomplish vision. You will observe, we have in both cases a most beautiful application of physical laws for certain purposes; but in both cases also there is something which transcends physics. In both cases we have shown how the image is formed on the insensitive screen—the ground-glass plate in the case of the camera, the dead retina in the case of the eye; but in both cases when in actual operation there is a sensitive screen in which wonderful changes take place. We will therefore pursue the comparison a little further.

7. Observe, then, in the camera we may consider three images: (1.) There is the light-image. the image which we have considered thus far; it is that for the formation of which the whole structural contrivance is intended; it is that which we see on the groundglass plate in looking in from behind; it comes and goes with the object. (2.) There is the invisible im-When the ground-glass plate is removed and age. the sensitive plate is put in its place, the light-image of course falls upon the sensitive plate, and induces in it certain molecular changes which are intense where the light is intense and feeble where the light is feeble; in other words, is graduated over the surface precisely as the light is graduated. It is, therefore, properly called an image, though invisible when the plate is (3.) The visible image or picture. After removed. the formation of the invisible image by exposure to the

light-image, the operator applies certain reagents which induce chemical change in the impressed part, which again is graduated in intensity precisely as the molecular change, and therefore as the light-image, was graduated.

So, also, we may consider three images as formed by the eye: (1.) There is the light-image, produced by the mechanical contrivance we have thus far discussed, the image which we can see in the dead eye precisely as we can in the camera. (2.) This lightimage, impressing the sensitive retina of the living eye, induces certain molecular and chemical changes, little understood, which are graduated over the surface precisely as the light-image is graduated, both in intensity and in the nature of the light, and may therefore be called the invisible image on the retina. (3.) By a law which transcends physics and chemistry, by a law which is utterly incomprehensible to us, this invisible molecular change—this invisible image—is projected outward into space, and seen there a visible, external image, or an object.

8. One point more. We have spoken thus far of one camera and of one eye; but there are certain peculiar and beautiful stereoscopic effects which can only be produced by the use of two cameras or of two eyes. On an ordinary stereoscopic card there are two pictures of the same scene; these are always slightly different, because taken by two cameras from different positions. The dissimilarity is absolutely necessary for stereoscopic effect. These two dissimilar pictures, when viewed in the stereoscope, instantly, from pictures, become apparent realities. We instantly experience

that perfect perception of depth of space and relative distance of objects which constitute the charm of this beautiful little instrument.

Now, the two eyes in every act of vision act the part both of a double camera and of a stereoscope; a double camera in taking the two pictures, a stereoscope in combining them for stereoscopic effect. Let me explain: I have already said that we have light-images upon the retinal screens of our eyes. I have said also that these light-images, or the molecular changes which they determine, are projected outward into space, and become there visible external images or objects. call them images, the signs of objects, because each eye has its own retinal images, and, projecting these outward, forms its own external field of view crowded with its own external images. There are, therefore, in binocular vision, two images for every object. double images, under certain conditions, may be observed to move with the motions of the eye. Whenever we look at any object, we adjust the position of the eyes in such wise that the two images of that object, one belonging to the one eye, and the other to the other, are brought together and superposed—are combined stereoscopically, and the object is therefore seen single. By varying the position of the eyes, we combine successively the double images of objects far and near. It is by this combination of slightly dissimilar images -dissimilar because taken, photographed, from different positions in the two eyes—that we experience that wonderful intuitive perception of relative distance of objects which it is the glory of the stereoscope feebly to imitate.

Finally: Besides all that I have said or can say about the beauty of this mechanism, beyond and above all this beautiful contrivance, this exquisite application of physical and chemical laws, there is that in the eye which transcends both physics and chemistry, or else is a physics and a chemistry more subtle than any we know; there is that which transcends all mechanism and contrivance, or else is a mechanical contrivance far more exquisite than any thing we can yet understand. In other words, there is life and intelligence. The eye is not repaired; it repairs itself. It is not adjusted; it adjusts itself. The mind compares the images presented to it, and forms judgments and ideas.

Now, some persons seem to think, perhaps some of you may think, that this, the inscrutable, the incomprehensible, must grow less and less, and finally vanish before the light of science. Nothing can be further from the truth. Science cannot remove the incomprehensible, but only increases it. In proportion as we increase the domain of the comprehensible, do we increase the apparent vastness of the incomprehensible. The comprehensible in the midst of the incomprehensible may be likened to a circle of light in the midst of infinite darkness. It is ever the effort of science to increase the area of that circle. But, in proportion as we increase the circle of light, do we increase also the circumference of darkness; in proportion as we increase the area of the comprehensible, do we increase also the points of contact between the comprehensible and the incomprehensible, and we are therefore more and more penetrated with humility and reverence in presence of the incomprehensible.

Thus, then, as I have attempted to show, we have, in the eye and in the camera, similar structural contrivance for a similar purpose, the contrivance in the one, however, far more perfect than in the other. But observe this further difference between the two: In the one we trace mechanism and physics and chemistry throughout. It must be so, as it is a product of human intelligence. In the other we trace similar mechanism, similar application of the laws of physics and chemistry, but only to a certain point; and then we pass beyond mechanism to something utterly incomprehensible to us—we pass from the physical to the superphysical, from the comprehensible to the incomprehen-It is so with all the works of Nature. trace a likeness to the human—though a more perfect and divine human—to a certain point, and then it passes beyond our sight from the human to the perfect divine. As the Divine Master, standing in the midst of his gathering disciples, even while they gazed upon Him, was taken upward until the parting clouds received Him from their sight, even so in every incarnation, in every visible manifestation of Deity, we trace the human upward, upward, as we study more and more deeply; but, as with upturned faces and straining, worshiping eyes we gaze, it is carried up from the comprehensible to the incomprehensible, from the finite to the infinite, from the human to the divine.

LECTURE III.

CONTRIVANCE FOR BEAUTY.

My Christian Friends: In my first lecture, you will remember, I attempted to show the evidences of intelligence in the general constitution of the universe, and in the animal frame. In my second lecture I attempted to show evidences of intelligence similar to our own, though infinitely superior, in the admirable structural contrivance of the eye. Thus far I have spoken only of contrivances for use, in adapting the animal body to external conditions; instruments for use in contending with external enemies on every side; weapons to be used in the sharp struggle for life.

But there is much else in this world besides use. Life is a time of happiness as well as of struggle. Life is intended for enjoyment as well as for battle. Nature must therefore be contrived so as to furnish materials of joy as well as materials of food. Beauty divides the empire of Nature with use. Everywhere we find it equally abundant and equally conspicuous. We see it in the diversified surface of our own green earth; we see it in the over-arching blue sky with its ever-changing and ever-moving clouds. We see it in the setting

sun, "arraying in purple and in gold the clouds that on his western throne attend; "we see it in the springing arch of the glorious rainbow; we see it in the sparkling dew-drop and the glittering gem. Neither is it less conspicuous in organic Nature. We see it in the brilliant and delicate tints of flowers, in the nacreous lustre of shells, in the metallic glitter of insects, in the painted wings of butterflies, and the gorgeous plumage of birds. And not only in form and color do we find it, but the air also of this enchanted isle, our earth, is full of sounds, "sweet sounds that give delight and hurt not." Neither is all this for man alone. As far as microscopic view extends we find, and beyond it there doubtless exists, the same profusion of beauty. As far as the deep-sea plummet reaches we find, and beyond it there still exists, the same abundance. Back in the dark abyss of Time, as far as the geological record extends, we find, and beyond it we must believe there still existed, the same lavish strewing of beauty. It is as if beauty had been ordained for beauty's sake; as if the Creator and Ordainer of all things delighted in beauty and in happiness.

It is obvious, therefore, that use and beauty are equally conspicuous and abundant on this our earth. But the object of science is not to point out these results, for they are sufficiently obvious: the domain of science is to show the means and processes by which these results are attained; in other words, to show contrivance for use and contrivance for beauty. Now, all recognize the contrivance for use, though science alone shows the exquisite perfection of this contrivance. But is there also a contrivance for beauty? Yes, there is

neither use nor beauty attained, either by man or in Nature, without intelligent contrivance.

Human art is of two kinds: mechanic art and fine art. The end or design of the one is use, the end or design of the other is beauty. We all recognize that the one end, viz., use, is never attained except by intelligent contrivance. But is this not equally true of the other also? The very meaning of the word "art" is intelligent arrangement or adjustment to attain certain ends. We do not usually call it contrivance in the case of fine art, because we cannot so well analyze the contriving process of mind. Nevertheless, in fine art, too, there is adjustment according to certain laws—not of use, indeed, but of proportion and of harmony; and beauty is never attained except by intelligent adjustment or arrangement, in other words, by contrivance, according to these laws.

But it will be asked: "Is this true of those simplest elements of beauty which we have named above, viz., sound and color? Are not these the very materials of art? Are not these simplest elements of beauty incapable of further analysis? Is there contrivance also underlying beauty of sound and beauty of color?" Yes; even these simplest expressions of beauty are never attained in Nature except through appropriate contrivance. They are, indeed the simplest elements of human art, but not of the more exquisite divine art. To take the case of sound. I need not refer you to the exquisitely-contrived vocals organs of birds and of man, but proceed at once to the analysis of beautiful sound itself. The difference between musical sounds and mere noise, as is well known, consists only in the form

and arrangement of the sound-waves, i. e., in the structure of the transmitting medium while in the act of transmitting. Color seems at first sight still more simple and incapable of analysis, but even color is never produced except by structural contrivance appropriate for that purpose. Let me explain:

Remember, that sunlight consists of lights of many different colors mingled together. The effect of the whole is to produce white light. It is evident, therefore, that colored lights may be produced either by separating these kinds of light from each other, or else by quenching some of them and leaving others. Now, in all cases of natural colors we find a structural contrivance appropriate to separate the colors, or to quench some of them. Some natural colors are produced by simple separation or dispersion of light. Such are the colors of the rainbow, of the dew-drop, and of colorless gems under certain circumstances. But most natural colors are produced by quenching some of the colors of white light. There are two general methods by which this quenching is produced: one is by absorption, and the other by interference. Thus, natural colors are of three kinds: dispersion-colors, absorptioncolors, and interference-colors. I have already given examples of dispersion-colors. Nearly all the ordinary colors of colored bodies are examples of absorption-The manner in which such colors are produced may be explained, in a general way, as follows: There is a peculiar molecular structure in such bodies by which certain colored rays of white light are quenched, and the others come back to our eyes. If all the rays are quenched except red rays, the substance will appear

red; if all are quenched except blue, the substance will be blue. The precise manner in which this is accomplished is not yet fully understood, but there can be no doubt of the general fact that in all such cases certain colored rays are quenched, and that this is accomplished by means of a peculiar molecular structure.

But that which is best understood is the arrangement for production of interference-colors. Colors of this kind are commonly called iridescence. Let us explain how iridescence is produced: It is well known that ordinary water-waves may meet one another in such wise that they coalesce and produce a greater wave, or else interfere and entirely destroy each other. Similarly, a system of sound-waves may so meet another system, that they coalesce and produce a greater sound, or else interfere and produce silence. also with waves of light. They also may coalesce and produce greater light, or else interfere and produce darkness. Now, if we take a transparent plate and make it thinner and thinner until its thickness is less, equal to or but little greater than the length of a wave of light, then the light which reflects from the nearer surface, and that which goes through and reflects from the farther surface, are so related to each other that they may coalesce or else interfere. Now, recollect that sunlight is composed of different kinds of rays. Further, that their difference consists in the different lengths of their waves. Evidently, therefore, the thickness necessary to produce interference of red rays is different from that necessary to produce interference of blue rays. If, then, the thickness is such that the blue rays interfere, the plate will be red, but, if the thickness

be suitable for the interference of red rays, the plate will be blue. Usually both colors will be seen in different parts of the same plate, depending upon the varying thickness, or else upon the direction in which the light comes to the eye. Observe a child blowing a soap-bubble: first, the bubble is simply colorless; gradually it becomes larger and larger, and therefore thinner and thinner, until suddenly it clothes itself in the glory of iridescence. As it continues to expand, the colors change with its thinness until it bursts. is in this way we account for the iridescence of thin films on the surface of water, for iridescence of micascales, for the fiery red and delicate blue internal reflections of the opal. In many cases we may even measure with the utmost accuracy the length of the waves of light, by measuring the thickness necessary to produce interference.

Not only thin plates, but lines on the surface of any substance, if sufficiently fine and close, may reflect light in such wise as to produce interference, and therefore iridescence. Points or pits also, if sufficiently fine and close together, produce a similar effect. It is in this way we account for the beautiful iridescence produced by polishing the surface of many shells. The extremely thin layers thus cut through, outcrop on the surface in lines sufficiently fine and close to produce interference. The iridescent colors of the wing-cases of many insects are produced by fine lines or by fine points. Human art has imitated these beautiful effects of Nature. A plate of glass or of metal, ruled with lines sufficiently fine, becomes splendidly iridescent. we ascribe this human result to intelligence, and the similar natural result to chance? Thus, then, we conclude that even color, as simple and incapable of analysis as it seems at first sight to be, is always produced by arrangement of molecules, or surfaces, or lines, or points, in other words, by appropriately-devised structure.

But there are far higher kinds of beauty than sound These are the lowest, simplest, most sensuous kinds of beauty. These simple elements of beauty, themselves the result of structural arrangement, are, in both human and divine art, again arranged and combined according to the laws of harmony to produce higher and higher beauty. Thus musical sounds, themselves the result of arrangement of waves, are combined with one another, by the musical composer, to form melody. Then melodies are again combined into more complex orchestral harmony, to produce still higher beauty. So with color also; colors, themselves the result of structural contrivance, are combined or arranged by the painter to produce contrast or harmony of colors. The effects thus produced are again combined with form, to produce higher beauty. Again, these forms are grouped or arranged so as to give rise to still higher styles of beauty. Thus, in every case, you perceive, in proportion as the harmonic relations become more and more complex, the beauty becomes less and less sensuous, more and more intellectual—in other words, of a higher and still higher order.

Precisely similar is it in Nature. Everywhere we find strewed with lavish profusion those simplest elements of beauty, the beauty of sound and color. These colors of earth and sky are combined with one another

to produce higher effects. Then these are again combined with forms of earth and sky, to produce landscape. It is the glory of art to imitate Nature in these wonderfully harmonious combinations. But there is still a higher order of beauty in Nature which cannot be imitated by art. There is still a higher order of natural beauty which addresses itself only to the thoughtful mind—a beauty so high, so pure, so intellectual, that it is not usually recognized as beauty: I mean the beauty of orderly arrangement and orderly movement according to perfect law. I can best express my meaning by illustrations:

You will remember that, in my first lecture, I com pared the solar system with a watch. But there is this difference: In the watch the whole structural arrangement is only for use; while in the solar system the wonderfully complex arrangement is ordained for beautiful order as well as for use. Observe the nature of the movements: the sun turns on its axis in a given direction; the planets all revolve around in this same direction, and they all turn on their axes in the same direction. The satellites, again, revolve around their primaries in the same direction, and also turn on their axes in the same direction. The rapidity of motion and the times of revolution, and their distances from the sun, are also related to each other in harmonic proportions. Thus, all the members of the solar family move swiftly but silently through the intricate mazes of a mystic dance. Now, is all this for use only? What is the use which we trace distinctly here? It is evidently to mark time, day and night, seasons and cycles, with perfect regularity and perpetuity. For this purpose regularity and stability are required. Now, mathematicians and physicists have proved that much of this beautiful order, for example, the direction of rotations, is not necessary either for stability or for the regular marking of seasons and cycles. Evidently, then, here is order for the sake of beautiful order. This is that beautiful harmony, that music of the spheres, dreamed of by the old philosophers, and which even in their dreams filled them with ecstasy, but is only now clearly revealed to our waking minds by science.

But the best illustrations of the combination of use and beauty, the best examples of contrivances for use and yet for beautiful order, are to be found in the organic kingdom. Let us sketch the history of thought on this subject:

First, the animal body was studied with reference to its wonderful mechanism, its admirable contrivances for use. This is the domain of the old natural theology. Then came, by the study of naturalists, the recognition of the strange fact that in the animal body there are often rudimentary and therefore useless parts. certain species of whales, for example, where teeth are not wanted or used, the useless rudiments of teeth are found beneath the gums. In the wings of birds, the bones of the palm and fingers are found, but united and useless. In the flipper of the whale or of the turtle, the bones of the palm and of fingers are found, but soldered together. In the leg of a horse only one single bone is useful, but other bones of the palm are present as useless splint-bones. Even in man we find some useless parts. For example, there are many muscles which

are of use in the lower animals, but of no use to man; yet they are found in man also, though in a rudimentary condition.

At first these were supposed to be rare exceptions. They were acknowledged, however, to be utterly unaccountable on the principle of design for use—they were admitted to be difficulties which could not be explained upon the principle of intelligent contrivance for use. But they were supposed to be only rare exceptions. Soon, however, they were found to be very common. "Useless organs in a contrivance for use!" exclaimed the skeptic. "Surely there is no contrivance, no intelligence, here; or, if intelligence, evidently a very blundering intelligence." The same folly has been repeatedly committed by skepticism—the folly of attributing blundering to Nature, when the blundering was only in the skeptic himself. Finally, by further patient study of Nature, came the recognition of another law besides use—a law of order underlying and conditioning the law of use. Organisms are, indeed, contrived for use, but according to a preordained plan of structure which must not be violated. This is the domain of the new natural theology.

This point is not easy to make clear, and yet too important and too beautiful to be neglected. I must, therefore, give some illustrations:

The higher organisms, as the human body, for instance, are exceedingly complex, with many functions and many apparently diverse organs. But, observe: I say apparently diverse organs, because, when analyzed to the last degree, all organs are found to be identical in their elementary structure. Organisms,

whether animal or vegetable, when reduced to their simplest anatomical elements, consist entirely of cells. Therefore, all organs consist of cells, and all functions are cell-functions. Now, if we commence with the earliest embryonic condition of one of the higher animals, and trace the various stages of development to the mature condition; or else, commence with the low-· est animal and run up the natural history series to the highest - we will, in either case, observe a similar In the earliest embryonic condiseries of changes. tion and in the lowest animals we find the cellular structure very simple, the cells being all similar in form, and the functions also are few and simple. we go upward in the one series or the other, new functions continually arise, and the functions of the body become more and more numerous and complicated. Now, as each new function arises, must there be an entirely new elementary part introduced? By no means. If use were the only end to be subserved, it might be so, but this would violate the original plan. therefore, is changed in its form, and thus adapted to the new function. Again, a new function, but no new elementary organ. The cell again takes on a new form, and performs a new function. Thus, in the higher animals, we find that a number of cells have taken on a peculiar shape, aggregated themselves into what we call an organ, and a special function is assigned to them. Another set of cells take on another peculiar form, aggregate into another organ, and have another special function assigned, and so for other functions. And thus the most complicated results are attained by the simplest conceivable means, and that without the

slightest violation of the original plan of structure, the cellular structure of the organism.

Let me give a more obvious illustration: Take a seed—a pea or bean, for example. Taking off the envelope, we find it consists of a short joint and a pair As it grows, another joint with its pair of of leaves. leaves is formed. As it still grows, again another joint with its leaf; and again another joint with its . leaf, and so on. The whole stem consists of a mere repetition of these simple elements, joints and leaves. After a while, buds appear, which grow into branches; but these, again, are only a series of joints and leaves, Now, the function of leaves, as you ad infinitum. all know, is the most wonderful and important in all organic nature. It is that of changing inorganic into organic matter, and thus furnishing the starting-point of all life. This wonderful function—the creation of organic matter-takes place nowhere else on the face of the earth except in the green leaves of plants. But, finally—it must be so, for the cycle of individual life quickly closes—finally, there arises another function, viz., reproduction. Now, this is a new function, not only different, but actually antagonistic in its whole nature to the other. Shall we not have new and entirely different organs for this new function? By no means. The same organs, the joint and leaf, are modified for this new function. For the flower also consists only of a number of joints and leaves variously modified—some to form the calyx; some more beautifully, to form the corolla; some more strangely, to form stamens Finally, in the ripened fruit, which is itself a developed pistil, and therefore a modified leaf,

we find again the seed from which we started. Thus, we have passed through the whole cycle of vegetation, and find nothing but a repetition of the same simple elements; the plan unchanged throughout, but the parts variously modified to assume the various functions as they successively arise.

But by far the most beautiful illustration I can give is found in the general structure of animals. Animals are divided into four great types or plans of structure, called respectively vertebrata, articulata, mollusca, and radiata. These are essentially different in their plan of structure, except in so far as they are connected by the universal cellular structure common to We might compare them to different all organisms. styles of architecture. We have several styles of human architecture: the Eastern style, the Greek style, the Egyptian style, and the Gothic style. These may be variously modified, to adapt them to the various purposes for which buildings are used, and that, too, without violating the style. So also these four styles of divine architecture are modified to adapt them to the various purposes for which animals are created, but without violating the style of architecture. Again, from the point of view of use, we may compare them to four distinct machines. We have also many distinct human machines, each of which may be adapted to various purposes. So, also, these four divine machines are adapted by modification to various purposes.

Now, far back "in the dark backward and abysm of time," there was a period when *fishes* were the only representatives of the vertebrate plan of structure. Evidently, at that time this plan of structure, or this

machine, was adapted only to locomotion in water. was a swimming-machine. Ages upon ages passed zeons upon zeons—until the time was ripe and the earth was prepared, and reptiles were introduced. have a new function, that of locomotion on land. we find a new organ introduced for this purpose? no means. The same organ which was the swimming organ before, by certain modifications of its parts, without essential change, becomes now a crawling organ. Ages upon ages pass away—æons upon æons—until the time was ripe and the earth was prepared, and birds were introduced. Here we have a new, a beautiful, a wonderful function—that of locomotion in air. Shall we not have a new organ for this? By no means. The same organ is again slightly modified, and becomes the wing of a bird. Ages upon ages pass away—æons upon zeons - until the time was fully ripe, and the earth fully prepared, and man was introduced; man made in the image of God; man, endowed with reason and capable of indefinite progress; man, the interpreter of Nature, and the worshiper of God. Now we want another and most exquisite organ, delicate and dexterous, which shall be the willing tool and the cooperator with the mind of man in his own progresswe want a hand. But Nature's laws are not violated even for man; and again the same organ is slightly modified for this purpose. And thus in the hand of man, in the fore-foot of a quadruped, in the paw of a reptile, in the wing of a bird, and in the fin of the fish, the same organ is modified for various purposes.

What I have said of this member is true of the whole structure. The vertebrate structure, the verte-

brate machine is modified by change in relative size of the parts, sometimes a part becoming rudimentary or even obsolete, but the plan remains the same throughout. Now we see, then, the meaning of useless organs. They are the successive steps of change; they are the keys to the Divine plan; they are the footprints of the Divine march.

Now, man also makes his machines and adapts them to various purposes. Let us, then, for the sake of comparison, follow the history of that triumph of human intelligence, the steam-engine. First, it was adapted for stationary work. After a while it was thought to adapt it for locomotion in water, for propelling boats, to make it a swimming-machine. But, for this purpose, essential changes of some parts and the introduction of entirely new parts was found absolutely necessary. Again, afterward, it was proposed to adapt it to locomotion on land, to make it a running-machine. essential changes and new parts are introduced. man, finite and short sighted in his mind and limited in his resources, essentially changes his plan as new and But the Creator, foreunforeseen contingencies arise. seeing the end from the beginning, provides for every possible contingency in the original conception.

I know that many will say, "All this is explained by evolution." Yes, it is beautifully explained by evolution; and this constitutes, in fact, the strong argument in favor of an evolution of some kind. But, observe, this evolution, if true, is only the process by which these results are attained. The result is what constitutes the evidence of intelligence; the process indicates only the kind and degree of intelligence; the kind like

our own, the degree infinitely superior. Again, the existence of useless organs is beautifully explained by evolution. It is, in fact, the key to evolution as it is to the Divine plan. But this only shows that evolution is the process by which the Divine plan is carried out. These two views, that which refers phenomena directly back to the primal intelligence, and that which refers them back to secondary and intermediate causes, have always existed and will always exist. They do not exclude each other. They are two formulæ for the same thing; the one the formula of religion, the other the formula of science. The one formula is an expression of the domain of faith, the other of the domain of knowledge. Now, in the history both of the individual and of the race, faith precedes knowledge and must continue to accompany it as long as we are finite beings. We are but children led by the hand of our loving spiritual Father. If we believe, we shall finally know the process; if we believe not, we shall remain in darkness and ignorance forever.

Again, another thought: We see around us everywhere invariable laws. Now, intelligence in the presence of invariable laws, or acting through invariable laws, can attain results only by contrivance. It is impossible that there should be invariable laws without contrivance, or contrivance without invariable laws. We are hampered, conditioned, limited on every side, by the inviolable laws of Nature, and, in order to attain results, we are compelled to resort to indirect methods, to mechanical and other contrivances, in accordance with these laws. This is the meaning of the word contrivance. Now, Deity himself, if He acts by laws, must

pring about results by what seem to us contrivances. Shall we then speak of Him, the unconditioned, as conditioned by the laws of Nature? With our limited faculties, we cannot do otherwise. We cannot speak of Him, we cannot even think of Him, except under But, observe the difference betwixt Him and us, in this regard. These laws of Nature, which condition man, are external to him, and, therefore, in the nature of a law of necessity. But, to the Deity, they are not external; they are the laws of his own being—they are the modes of operation of his own will, perfect, because He is perfect, invariable, because He is unchangeable. Thus, then, the laws of Nature are to Him not a law of necessity, but a law of freedom. In other words, they are not conditions at all, in the sense in which we use that word, in speaking of With this explanation, I will still continue to use the word conditions.

Contrivance for use, then, is conditioned by the laws of force; contrivance for beauty is conditioned by the laws of form. Thus, there are two great departments of human art—mechanical arts, and fine arts. The end of the one is use; the end of the other is beauty. One is the human embodiment of the laws of force; the other is the human embodiment of the laws of form. Mechanical art or useful art is conditioned by the laws of force, or what we have called the law of use. Fine art is conditioned by the laws of form, or what we have called the law of beauty. There are some arts, however, which belong to both departments. Such is the art of architecture. Architecture is intended for use; it is also intended for beauty. It is conditioned by the

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laws of force; it is conditioned also by the laws of form. Thus conditioned by two laws, and having two distinct ends, it is far more difficult to attain perfect results. For this reason, architecture is the most complex and the most imperfect of all fine arts. We are compelled sometimes to sacrifice use for beauty, sometimes beauty for use. To take any pure style of architecture, and adapt it to all kinds of purposes, so as to attain at the same time the most perfect use and the highest beauty, and all without violation of the style, is to our finite faculties almost impossible. Now, it is just this very thing which is done in Nature. The most complete results are attained, although the work is conditioned, at every step, both by the laws of force and by the laws of form.

Finally, see this Divine work, this great and beautiful work of art, which we call the universe! not made for use only, but also for beauty—not conditioned by the laws of force only, but also by the laws of form. It has been often and well compared to architecture. But not architecture for use only, but also for beauty; not a mill or work-house only, in which we each have our daily work, but also a glorious temple in which we all have the duty and the privilege of daily worship.

LECTURE IV.

THE SPIRITUAL NATURE OF DEITY .-- "GOD IS A SPIRIT."

My Christian Friends: We have thus far attempted to show that the God revealed in Nature, like that revealed in Scripture, is not an impersonal, all-pervading principle, as supposed by the pantheist, but an infinite Personal Intelligence, contriving for use and for beauty. But there is still something more required for the highest and purest conception of Deity, and accordingly we have something more revealed in both of these books. You all remember the memorable words of the Divine Master: "God is a spirit: and they who worship Him must worship him in spirit and in truth." Now, Nature also reveals a similar Deity, and enjoins a similar worship. Nature, too, if it reveals any Deity at all, reveals a spiritual Deity-a Being who thinks and wills and works everywhere around us and within us, and yet is not seen by us. The subject of my lecture this evening is contained in the words of the Divine Master just quoted: God is spirit; therefore, worship must be spiritual; or, "Spirit and its relation to form."

What is spirit? What evidence have we of the existence of any such thing as spirit? My friends,

how often in this material age do we hear this question asked! How often do we silently and, perhaps, anxiously ask this question of ourselves! But no one asks, What is matter, and what evidence have we of the existence of matter? Yet, it seems to me that the evidence in the two cases is precisely the same, both in kind and degree. For, observe: How do we define It is something which has extension and inertia, and possibly color and weight, and other wellknown properties. But these are only properties of that something; they are only phenomena by means of which matter reveals itself to us through our senses; they are only matter as it appears to us. But that substance in which these properties inhere, that something which underlies these appearances, the essential nature of matter-of this we know and can know absolutely nothing. So precisely is it with spirit. define it as something which thinks and wills and feels. But thought, will, emotion, these again are but phenomena revealing themselves to us in consciousness. that which lies behind these; that something which thinks, wills, feels; that substance or substratum in which these properties and phenomena inhere-of this, the essential spirit, we know and can know absolutely nothing.

Thus, all human knowledge is necessarily phenomenal. Essential knowledge belongs to God alone. The materials of human knowledge are all revealed—revealed through our senses; revealed in our consciousness; revealed in Scripture. We accept these by faith, and the true and only function of reason is to arrange and organize these into rational form.

It is hard for proud human philosophy to accept this—the limitation of the human faculties. The old Greek philosophy, the very type of proud human philosophy, despised this phenomenal knowledge. "Things as they seem! things as they appear! This kind of knowledge," they said, "belongs to the people! This is popular knowledge, not philosophy! The true aim of philosophy is to know things as they are, not as they seem; is essential knowledge, not phenomenal knowledge." The questions, therefore, which these proud philosophers attempted to solve were not concerning the phenomena and laws of matter and of spirit, but rather the essential nature of matter and spirit - in a word, of being. These were the high questions upon which the greatest energies of perhaps, the greatest minds the world ever saw, expended themselves. And what was the necessary result? Not the slightest advance in true scientific knowledge. intellectual Titans would scale the heavens and usurp the very throne of God; and of course were cast down again to earth. But science accepts what was rejected by the old Greek philosophy. Science has accepted phenomena as the legitimate and only domain of human reason. This sensuous embodiment of essential knowledge, this incarnation of divine truth, despised by the old Greek philosophers, is the basis upon which the whole fabric of our modern science has been erect-This humble stone, rejected by the old Greek builders, has been accepted by science and become "the head of the corner."

This limitation of the domain of our human knowledge is universally recognized in science, but the old

Greek spirit still lingers in metaphysics. The transcendental philosophy of Germany still vainly strives to attain a higher and different kind of knowledge from that which belongs to the people; still is unwilling to acknowledge that true scientific knowledge is only a more perfect and rational form of popular knowledge.

All our knowledge, then, is phenomenal and not es-But there are two distinct groups of phenomena-one belonging to matter, the other belonging to spirit—so distinct, so widely separated in their nature, that we cannot now and probably never will be able to bring them together into one group. If there is any place where we might hope to bring these two groups in contact, and show that they are really one, evidently that place is our own human body, where we know both are exhibited. Hence, this has ever been the favorite field of the materialist. We trace sensation as a vibratory thrill which is conveyed by the nerves from the exter-We go further, and determine nal world to the brain. the very velocity of that vibratory thrill—and it has been determined. We go further, and find that every phenomenon of thought, will, or emotion, is connected with certain changes in the brain. We go still further, and find that there is a quantitative relation between the change in the brain and the amount of intellectual We may hereafter go still further, or emotional work. and find for every faculty of the mind a particular por-We may possibly, in the future, go tion of the brain. still further, and find that there is a particular kind of. molecular vibration corresponding to each kind of emotion or thought. We may find, as some have imagined, a right-handed gyration of molecules, corresponding with love, and a left-handed gyration corresponding with hate. Suppose all this, and much more than we can now imagine, be traced. Are we any nearer the identification of matter and spirit? Is there any conceivable connection between these material changes and the phenomena of thought, will, and emotion, with which they are associated? There is, and must ever be, trace it ever so far, an impassable gulf between these two groups. They are phenomena of different orders—the one inherent in matter, the other inherent in spirit. It is right that we should use different terms to express the underlying substance in which these different properties inhere.

But, faith in this spiritual world, how different is it from that which we have in the material world! How clearly, how distinctly we realize this material world; how feebly we realize the existence of the spiritual world! What is the reason of this difference? The answer, I believe, is perfectly plain. It is, that our material senses—the senses through which this material world reveals itself to us—are so acute, so strong, so clear, while our spiritual senses are so dull and feeble. It is as if the spirit were sunk, immersed overhead, and drowned, in our sensuous nature; so that this sensuous world seems to be our only native element, the only element in which we live, and move, and have our being.

Man is an anomaly in the universe. He lives, or ought to live, in two worlds, a spiritual and a material. He is a child of his spiritual Father, God, but he is also the child of his material mother, the earth, a divine spark inhabiting a clod of dust. Living in these two

worlds, he has senses appropriate to both, and by means of which knowledge or perception is direct, immediate, and therefore transcends analysis. Our intuitions are in the nature of spiritual senses, by which we attain knowledge directly, by processes which transcend the power of our analysis. In the ideal condition of man -whether regarded as a condition from which we have fallen, or a condition to which we have not yet attained—in the ideal condition of man, as we can conceive him, these two worlds are equally his; his senses in each are equally acute, his life in each equally vigorous, and therefore his realization of both, equally distinct and clear. In such a condition, I suppose, to attempt to prove the existence of the spirit, would be simply an impertinence. It would be already more certain than any reasoning or any proof could make any thing. We would realize it as we now do the external, material world around us.

But, alas! man is sadly imperfect, whether by fall or otherwise, in his spiritual nature. His spirit is, as it were, immersed and drowned in his sensuous nature. His spiritual senses are dull and stupid: having eyes, he sees not; having ears, he hears not. His spirit is not dead, indeed, but in deep, opiate sleep, and dreaming: some, frightful nightmare dreams, which shake the soul with terror; others, sweet dreams of a happy life hereafter; but all of us, only dreaming.

You will doubtless, many of you, recollect Plato's doctrine of reminiscence. It has had a great charm to my mind as suggestive of profound truth. According to Plato, we all once lived in a state of existence higher and more spiritual than our present life. For some

wrong-doing, we were banished and compelled to take up our abode in material, animal, brutish bodies. In this state we have forgotten our higher life. Sudden glimpses of glorious truth, which sometimes come to philosophic genius, inspirations of poetic genius, revelations which come from time to time to the great teachers of the world—these are but *reminiscences* of this former, higher life.

Now, every one, who has ever thought much, must have had experiences like those which gave rise to Plato's doctrine; truth, indeed, does come to the mind suddenly, like an inspiration—like a reminiscence of something which we had forgotten—like a sudden revelation—like an opening of eyes and restoration of sight. Ah! who that has thought, has not felt the joy of the moment of inspiration? All our best thoughts come in this way. The whole function of reason is afterward to verify, and arrange, and systematize these sudden inspirations; and it is in this subsequent process that science is so far superior to all other departments—in this power of reducing to perfect form—of chiseling the rough block for its appropriate place, in the building of organized knowledge.

Now, this joy of the scientist in the sudden perception of truth, the joy of the artist in the sudden perception of glorious beauty, the still higher joy of the Christian in the influence of the Divine Spirit—these are the evidences of the spiritual life, the reminiscences of our higher life. In proportion as we cherish these reminiscences, do we again live that higher life. But, alas! how like angels' visits are these moments of joy! In all of us, this higher life is so weak that it

seems like a reminiscence, a dream. Thus we, like dulleyed lotus-eaters, lying listless upon the shores of Time, far away from our home and our loved ones, we love to talk and dream, with half-shut eyes, of that distant home, and those loved ones; but alas! how imperfectly do we realize their existence!

How shall we, then, realize more perfectly the existence of a spiritual world? Is not this, indeed, the question of questions? Is there any question more important than this? Is not the realization of a higher spiritual world and a higher life the great want which we, all of us, feel? Is not the absence of this realization, the difficulty of realizing any thing but this material world, the great bar to religion? How shall we, then, realize the spirit-world—God, and the immortal soul as a verity, as we do the material world? I answer, not by thought, or by reason, but by life and activity in that world. How is it in regard to the material world -how do we realize this? By thought and reason? no: by activity. Thought and reason, so far from proving to us the existence of the external world, and helping us to realize it, only teach us to doubt it. have been philosophers who, by going into their closets. shutting the door, closing their eyes, stopping their ears, and turning their whole mind in upon itself, have actually reasoned themselves into the belief that the external world is a mere delusive image of interior states of the mind, projected outward by a law of the mind itself—an unreal phantasmagoria floating about There have been some philosophers who have us. reached this conclusion, as the result of pure thought, unchecked by activity and the faith which comes of activity. But, as soon as the philosopher opens the door of his study, and steps out into the world, all his faith in the material world returns. So, precisely, is it with the spiritual world. It is not by thought or by reason that the existence of the spiritual world—that those great spiritual truths, God, and immortality, and the fundamental truths of Christianity—can be realized as verities; but by activity, prayerful, loving, helpful activity in the spiritual world. Accept these truths by faith, as the revelations of consciousness and of Scripture—act upon them, and we will find that in proportion as our spiritual activity is more vigorous, in proportion as we cultivate the higher faculties of the soul, which are connected with these truths-in the same proportion does the spiritual world become to us a reality, requiring no proof.

You will doubtless remember the answer of the Divine Master to the carping Jews, asking for a sign to prove the truth of his doctrines. It contains the profoundest philosophy: "If ye will do the will of my Father, ye will know of the doctrine, whether it be of God." Do first and know afterward; knowledge comes as the reward of faithful obedience. Thus, then, you will observe, the function of faith and of activity is to give realization of the spiritual world precisely as it does the material world, and thus to furnish the materials of knowledge; the function of reason is to bring the materials, thus furnished, into consistency with each other, and thus to give them a true rational form.

If, then, we accept the existence of a spiritual world, if God and the human soul are spiritual, then the only true worship must be *spiritual worship*; "They who

worship him must worship him in *spirit* and in *truth*." This brings us to the second part of our subject.

If there be one characteristic of Christ's teaching more conspicuous than any other, it is perhaps the constant assertion of the *spirit* against the *letter* in the interpretation of Scripture, and against mere forms and hypocrisy in worship. "Ye make void the *law* through your traditions." "Ye tithe mint and anise and cumin, and neglect the weightier matters of the law." "I would have mercy, and ye give only sacrifice." Thus it is everywhere throughout his teaching. In his sermon on the mount, whenever He commences, "Ye have heard that it hath been said," then follows the mere formal and literal expression of the law; but, whenever he continues, "But I say unto you," then follows its innermost spiritual significance.

Thus, then, true worship is always the upward yearning of our spirits in childlike love and reverence toward the Father of our spirits. Evidently, therefore, forms are of use, and can be of use, only in so far as they are helps to the weak spirit—only as they embody and reveal our spiritual states, and thus strengthen them. You will observe, Christ does not condemn forms, for he says, "These ought ye to have done and not to leave the other undone." As helps, however, to the weak spirit, and the wavering faith, beyond all doubt, forms are of inestimable importance, and it seems to me the tendency of the age is too much to underrate them.

What, then, is the nature and degree of religious form consistent with a true spiritual worship? You will at once recognize the almost infinite importance

of this question. The question lies in my way. I will not avoid it, particularly as there is a tendency in the present age to despise forms—a tendency, perhaps, strongest among scientific men, and therefore supposed to be the natural result of the study of Nature. Many say, "God is a spirit, and, therefore, the spirit of man must worship Him face to face everywhere, and without forms of any kind." Now, the philosophy of forms is not a question of religious worship only; it is a question which underlies our whole human life. Form in relation to spirit; form veiling, yet revealing the spirit; form concealing, yet expressing and adorning-is not this the very philosophy of society? Is it not the very philosophy of art; is it not the philosophy of clothing and dress? Is it not the very condition of all our civilization and of all our culture? Is it not, indeed, the very philosophy of humanity? Such being the comprehensiveness of this subject, of course I can do nothing more than touch lightly upon a point here and a point there, regarding the subject always from my own point of view, as a student of Nature, and then leave the thoughts thus presented as bare suggestions which you may follow out for yourselves:

1. The necessity of forms. Man is, indeed, spiritual, and a true worship is, therefore, none other than an answering of his spirit to the Infinite Spirit. But man's spirit is incased in a material body, and is therefore reached only through material means, and reveals itself only through sensuous forms. Let me illustrate this fact from several departments:

First, in the realm of Science. Simple truth addressed to the intellect only, as bare abstract proposi-

tions, how feebly is it grasped by the human mind! But let the same truth be illustrated in the physical phenomena of Nature, or let it be embodied in a work of mechanic art, and how clear and distinct is our conception of it now! So also in the realm of fine art. The beautiful conceptions of genius which float like summer clouds in the clear heaven of the poet's mind, "like summer clouds vanish, and leave not a rack behind," unless incarnated, embodied in glorious forms of immortal verse. A noble, strong, and manly spirit! is there any thing so grand and noble as this—the very type of all grandeur, the reality, of which all other grandeur is but the feeble symbol? But how much more this impresses us if inclosed in a noble manly. form! A beautiful spirit! is there any beauty like this, the very type of all beauty, all other kinds being but feeble imitations, and only worthy as they embody and express this, the true spiritual beauty? But how our perception of this is intensified, how we all bow in admiration, in reverence, almost in worship, when this is inclosed in a lovely womanly form! It is this which makes Art, along with Science and Religion, one of the three great teachers of the human race. of it! The ideal human form, as embodied in Greek art! What does its beauty consist in? It is a symbol which reveals to us the beautiful human spirit; and then, in contrast with this, we remember our own spiritual deformity. We look at this picture, and then at Is not this, indeed, a teacher of humanity?

Now, if it be so in human things, how much more must it be so in divine things; so much more difficult is it for us to realize divine things! The Deity must be visibly embodied in Nature. He must be embodied again in more human form in Scripture. He must be again embodied in perfect human form like ourselves, in Christ, before he can thoroughly reach the mind and the heart of man. Thus, also, the great truths of Christianity must be embodied in a visible church; must be embodied again in a more human form in the lives of good men about us, before they can thoroughly impress and move us. Thus is it also with worship. Worship must embody itself in visible forms before it can reach and affect our spirits, so deeply are they incased and embedded in the sensuous.

2. The continued use or frequent repetition of forms. There are many persons who seem to think that forms. however they impress at first, utterly lose their power by frequent repetition. On the contrary, if the forms are really appropriate—if they are the natural embodiment of the spiritual state—they only help the spirit more and more with every repetition. Is it not so with other kinds of forms? We read a passage of poetry, and it produces a certain exalted condition of mind. In a little while it passes away, leaving only a small residual effect. Neither memory nor imagination can revive the emotion. We must read it again and again. The very form and the rhythm are absolutely necessary to the emotionate effect. We look upon a picture, and it produces certain emotional effects; with the withdrawal of the picture these rapidly fade away, and cannot be again revived in their fullness, except by the re-presentation of the sensuous form. We listen to a strain of music; the effect may linger a while like echoes in the soul, but it soon passes away. Neither

memory nor imagination can recall the emotion; the very form itself must be again presented to the senses. Thus it is always in appropriate form; and this is the test of appropriateness. No work of art is worthy the name unless it can bear this repetition. No painting is worth seeing unless it is worth seeing hundreds of times with ever-increasing effect. No music is worth hearing, that is not worth hearing a thousand times, and always with increasing effect. No novel or drama is worth reading, at least as a work of art, unless we can read it for the hundredth time with still-increasing pleasure.

. Thus is it also with forms of worship when they are really appropriate. Every time we bow the head and bend the knee in prayer, the spirit of prayer—the spirit of humility and reverence—descends upon us in greater abundance. Every time we lift our voices and join in praise, the soul is borne upward with easier and easier flight. And especially is this true if the song is old as well as appropriate, for then all the thronging associations of previous religious emotion come rushing upon the soul. Thus it always is if we strive earnestly to cultivate the spirit through the form. The principle is perfectly plain. It is this: The tendency of form, when appropriate, is always to produce that spiritual state of which it is the natural expression. The forms of politeness have a tendency to produce and to cultivate those feelings of kindness and gentleness of which they are the natural expression.

¹ Beauty is often enhanced by novelty; but it is also enhanced by clustering associations—and this latter is especially true of religious forms.

position of prayer has a tendency to produce in the spirit that condition of humility and reverence of which it is the natural expression. There are some persons, usually persons of noble, truthful character, and therefore despising hypocrisy and hollow form, who say, "We cannot, will not assume the *form* of worship unless the *spirit* of worship is already in the heart." I deeply respect the feeling. But let such persons remember the law that *form* tends to produce the spiritual state—that we reach and cultivate the spirit through the form.

3. The danger of excess of form. The spirit is weak and requires help of sensuous form; but sense is strong, often too strong for the weak spirit. If the sensuous predominates too greatly it overpowers the spirit: we stop at the sensuous embodiment, and never reach the spirit at all. It is so not only in worship; it is so in every department of life. The tendency of the mind everywhere is to stop at the means, and forget the true end; to stop at the symbol, and forget the thing signified; to stop at the form and forget the spiritual state which it was intended to cultivate. This is the fruitful source of idolatry; we must have a sensuous visible embodiment of Deity; but, when we have it, we stop, there and lift the heart no higher. the fruitful source of dead forms; we must express our spiritual states in forms, but if the forms are excessive we are apt to stop there and our worship begins and ends in forms. This is also the fruitful source of all the imposing shams, the false and vain and hollow splendors of this world which dazzle the eyes of the multitude so much. For this reason many earnest persons run into the other extreme and say, "If these be effects of forms we will have none of them." But this extreme is even worse than the other; for, if too much form oppresses, too little form exposes the nakedness of the spirit; if one smothers, the other leaves the weak spirit to perish with cold.

4. The law of the use of forms. As I have already said, forms are intended to help the weak spirit. Therefore, as the spirit grows stronger and purer, forms should, it seems to me, grow fewer and simpler; there is an inverse relation between spirit and form.

We may illustrate this inverse relation in many ways. Take, first, the case of forms of society. I think there can be no doubt that, as we advance toward an ideal condition of society, ceremonious forms are put aside more and more, until, in an absolute ideal condition, nearly all that we call forms must pass away entirely. Whatever of form would remain would be but the spontaneous expression of the spiritual states. The forms of politeness, for instance, would become only the spontaneous expression of kindness and gentleness of heart, and therefore would no longer be forms, as we usually call them. The history of the Church, it seems to me, reveals the same law. You will recollect, at the coming of the Divine Master, what a multitude of minute additional forms had incrusted the Jewish church, full of forms and splendid symbols as it was at all times. All of these were cast off by Him as the founder of a new and more spiritual religion, and the forms of worship used by Him were only those of the simplest conceivable kind. I know not that He used any other than the bowed or prostrate form of prayer.

In apostolic times, while the spiritual life was still strong, the forms appear to have been few and simple. But, as decay of spiritual life progressed in after-times, the vital spark became more and more embedded in an ever-increasing mass of obesity until it seemed almost extinct. With the Reformation came a revival of spiritual life and a greater simplicity of forms. Again, whatever opinions we may have about puritanism, every candid historian must admit that the puritan movement was an assertion of the dignity of the human spirit, in the midst of the hollow and frivolous forms of that time.

Thus must it always be. But the mistake, which most persons make, is that they suppose the decaying life is always the result of the increasing forms. On the contrary, increasing forms is rather the sign than the cause of decay. So far from forms, even excessive forms, being always the cause of decay, they seem often conservative in their effect—they seem to incrust and inclose the feeble life as in a chrysalis shell, and thus protect it from either death or corruption. Like the accumulating ashes of an expiring fire, they seem to preserve from utter extinction. If we will throw cff forms, then, let us beware that we do not expose the nakedness of the weak spirit, and thus destroy its feeble life; let us be very sure that it is only the growing, swelling spirit breaking the outward shell.

5. Forms change. Forms of all kinds are and must be human, and, therefore, like all things human, must change in order to adapt themselves to the growing spirit. All spiritual things, but more especially divine things, must put on sensible, human, changing form in

order suitably to affect us. Divine truth revealed in Nature must take on the human, growing, developing form of science before it thoroughly reaches and affects our minds. Divine truth revealed in Scripture must take on the human form of theology, which also must necessarily change with more enlightened interpretation. The divine nature itself must take on a human, changing, growing, developing body in order thoroughly to be appreciated by us. It is, therefore, a universal law: every thing divine must take on human, and therefore changing, developing form in order suitably to affect us. Therefore, the Church, also, the visible form and body of the living spirit of Christianity, must and ought to be subject to change. Every form, whether of society, or government, or of the Church, ought to change, by yielding quietly to the pressure of the growing spirit: otherwise, the pressure increasing, the petrified shell is violently burst, and cast off by revolution.

LECTURE V.

RSSENTIAL NATURE AND ATTRIBUTES OF DEITY.

My Christian Friends: In my previous lectures I have spoken of the *personality* and of the *spiritual* nature of Deity. According to promise, I now come to speak of his attributes.

Matter and spirit reveal themselves to our senses through properties. Person reveals itself to our minds through character. Deity reveals Himself to us through attributes. Of these, we will speak first of what are called his essential attributes, viz., omnipresence, eternity, unchangeableness, omniscience, and omnipotence. These are called essential attributes, because they are most nearly connected with his essential nature. They are, as it were, the first step from his essential nature in the downward flow of revelation from Him to us. There is, however, one attribute, if attribute it may be called, which is higher even than these essential attributes. There is one which stands above these, and from which these themselves seem to flow. not whether I should call it an attribute at all. It is, rather, the nearest approach which the human mind can make to conceive, and human language to express, the essential nature itself of Deity. I refer, of course, to absolute, unconditioned Being.

We look around us upon Nature and we see all matter in constant movement, circulation, change; phenomena ever shifting, fleeting, varying. The unthinking mind rests satisfied upon these shifting, fleeting, varying phenomena; but the thoughtful mind, just in proportion as it exercises its human faculty of thought, is dissatisfied with these, and seeks and must ever seek something more fixed from which these phenomena are derived, and upon which they rest as their cause. This, indeed, is the chief and only object of science. Science ever seeks the fixed in the midst of the varying. She passes first from the infinitely variable phenomena to the more fixed laws of Nature; from these again to the more fixed forces. But these, also, she finds are not absolutely fixed. These forces electricity, magnetism, gravity, heat, light, and vital force—are also changeable the one into the other. ascends, therefore, still higher for something more universal and fixed, and the last term of scientific thought is and must be the recognition of one universal, allpervading force.

Again, science passes from the fleeting phenomena to the more fixed immediate causes: from them it passes to higher, more fixed, and more general causes: from these, again, to still higher and more general causes. Thus step by step it ascends, and cannot rest except in the recognition of one universal first cause.

Everywhere we find the same process of thought and the same termination. Take one more example: The cycle of human life, so rapidly changing and so

quickly closing, is itself embraced in the more general and slower movement of the development of the human race. But this, also, is a cycle; this, also, had a beginning, and must also close. But it is again embraced in another and still more slowly-moving cycle of changes, viz., the evolution of the organic kingdom. however, in its turn had a beginning, and must also close; but it is again in its turn embraced in another still more slowly-moving, more slowly-changing cycle, the cycle of the life of the earth. And this is again embraced in a still grander cycle of the life of this our solar system. And this, again, in another still grander, still longer, still more slowly-moving cycle, so slowly moving that our human senses cannot detect it, yet we know it had a beginning, it must have passed through changes, and it must have an end-I mean the cycle of the cosmos, of the beautiful order of the material But the mind cannot stop here—it is ineviuniverse. tably and logically driven one step higher. There must be a life which has no beginning, is not subject to evolution, and has no close. There must be an existence which is not thus involved in a cycle.

Thus on every ascending line of thought we inevitably reach the same result. In the midst of the variable there must be an invariable; in the midst of the fleeting, shifting, and changing, there must be the eternal and unchanging; in the midst of all the derived and caused existences around us, there must be something from which these are derived and by which they are caused, but which is itself underived and uncaused. There must be a self-existing Being—a Life underived, all embracing, all-supporting, by whom all other things

exist, in whom all things consist; besides whom there is in the deepest sense no other existence, whose existence taken away, blotted out, and there remains—nothing. This is the unconditioned, absolute Being of God.

Now, is it not wonderful that this, the last term of human thought, the highest result of human philosophy, the grandest idea that ever entered the human mind, should be found clearly and grandly expressed in the Hebrew Scriptures, written more than three thousand years ago: "And the Lord said unto Moses, I am that Iam; say unto the children of Israel I am hath sent me to you." Can we imagine any words more grandly and perfectly expressive of simple, absolute, unconditioned being? How can we explain this fact unless we admit those Hebrew Scriptures as a revelation?

It is believed that this idea of unconditioned being is expressed also by that most sacred Hebrew name Jehovah. It is said that this name was held in such deep reverence and sacred awe by the Jews of old, that they never allowed it to pass their lips. In reading the Scriptures, whenever this word occurred, they either substituted some other word, or else passed it over in silence and with bowed head. I have often thought that it would be well for us if we would take a lesson of reverence from these old Jews. I have often thought that there should be some one name for Him which should be pronounced but seldom, and then only when the heart was attuned with deep reverential emotion. must speak of Him, as indeed we must and frequently, let us speak of Him as the Deity, as the Creator, as the Author of Nature, as the Father of our spirits, as the

Holy One, the Good One, the Infinite One; but it would be well if we reserved one name which we never pronounced but with bated breath and quivering lips.

The absolute, the unconditioned, the self-existing! How shall I speak of this? What can I say of that which lies beyond the reach of human thought? What can I do, but simply to hold it up before you and leave it there? The unconditioned! Why, the attributes, even the highest attributes of Deity, as we conceive them, already condition Him. He cannot reveal himself to us, except under conditions. We cannot speak of Him without conditions. We cannot think of Him even, in the highest flights of thought, without conditioning Him. To conceive clearly of the unconditioned, is simply impossible; for, it is the attempt of the finite to grasp the infinite. To think much and long of the unconditioned is not good for us. It paralyzes the power of thought and bewilders the mind until finally we babble unintelligible jargon, as is notably the case with all the German philosophy of the unconditioned. To gaze too steadily and too long, only dazzles and blinds our eyes. Therefore, He has kindly revealed himself to us under material conditions, and with human attributes, divinely human attributes in Nature, in Scripture, and in Christ. The insufferable light of the absolute must be veiled in order to be revealed to us.

Let us, then, while we view his attributes in our human way, do so in the reflected light of the absolute. If we must think of Him and speak of Him in our human fashion—as, indeed, we must—let us bear the light of the absolute in our minds and in our hearts,

that we may be duly affected with reverence and humility. Indeed, we must think of Him and speak of Him in human fashion; how else can we apprehend Him and love Him? But, we must do so in the light of the absolute; how else can we worthily reverence and worship Him. With this light of the absolute still lingering in our minds and our hearts, let us then pass on to the first attribute, viz.,

Omnipresence.

It is impossible for human language to express this attribute more finely and impressively than has already been expressed in Scripture. The passages are doubtless very familiar to you all, but you remember appropriate form ever revives the corresponding mental condition. I will, therefore, repeat one of these: "Whither shall I go from thy Spirit? or whither shall I flee from thy presence? If I ascend up into heaven, thou art there: if I make my bed in hell, behold thou art there: If I take the wings of the morning, and dwell in the uttermost parts of the sea, even there shall thy hand lead me, and thy right hand shall hold me. say, Surely the darkness shall cover me; even the night shall be light about me: yea, the darkness hideth not from thee; but the night shineth as the day: the darkness and the light are both alike to thee."

Now, I wish you to observe that this word omnipresence does not mean hugeness or immensity, occupying all space, in the same sense as our bodies occupy a portion of space, with a divided energy and a divided life, here a part and there a part. It is something far less gross and material than this. The divine omni-

presence is the complete, undivided life and energy of the Deity everywhere, at once. This is omnipresence as we usually conceive it. It is this which is expressed in the language above quoted. It is the highest that our human thought can fairly reach. But, in the light of the absolute, it is something more and higher than To Him there is no such thing as space. Space is a condition of human thought—of finite thought. He is unconditioned by space. To Him there is no where or place, no here nor there nor yonder. Nevertheless, we cannot grasp this thought—it is not good for us even to try. As already stated, the highest that our human thought can reach—for, we are conditioned by space, not only in our existence, but in our thoughts—the highest that our human thought can reach, in our utmost attempts to conceive the divine omnipresence, is immediate presence of the whole undivided, divine life and energy in every place. Observe, however, I say immediate presence, not a general superintendence which delegates efficient power, controlling the phenomena of Nature, to secondary agencies and forces; but direct, divine agency in all the phenomena of the universe.

It is the common idea, perhaps most common among scientific men, that the phenomena of Nature are controlled and determined by secondary agencies and forces, under the general superintendence only of Deity. If so, then, annihilation of Deity would not immediately affect the course of Nature; it would still go on, at least for a while, under the power of these subordinate agents. But such a view is evidently inconsistent with any just conception of Deity. No:

God is not far away, exercising only general oversight and delegating immediate action to secondary agents, but ever present, immediately in Nature. The forces of Nature, operating everywhere and at all times, are but the omnipresent and sleepless energy of the Divine will; the laws of Nature are but the modes of operation of the Divine will in carrying out the Divine thought, perfect because He is perfect, invariable because He is unchangeable; the objects and phenomena of Nature are but the visible manifestations, the incarnations of the Divine thought. This is the view of Scripture; it is the religious view; it is also the view of the highest and truest philosophy.

But you will say, "This is not the scientific view, it is not the formula under which knowledge is organized and increased." Very true; if the immediate Divine presence everywhere were thoroughly realized, the religious spirit would overpower the scientific spirit: prostrate worship would take the place of scientific research. This is not good for us—the absolute must be veiled. Therefore Science interposes between the phenomena and the First Cause a chain of secondary causes which carry us upward only in our highest moments to the immediate presence of Deity. It can-This is our working formula; it is not be otherwise. the formula under which the materials of knowledge are gathered, and the temple of Science is built. when our daily work is done, when we have put aside our work-clothes, when we have retired into the home of our own spirits and our own meditations, then let us not forget the higher, the truer, the religious view.

The next attribute of which I shall speak is

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Eternity, or Omnipresence in Time.

"Before the mountains were brought forth, or ever thou hadst formed the earth or the world; even from everlasting to everlasting thou art God." This language expresses, as perfectly as language can express, the Omnipresence of Deity in Time.

As I shall frequently use the word time, let me for the sake of clearness draw your attention to the somewhat different senses in which it is used. It is used in popular language and in general literature and in Scripture in one sense. It is used in philosophical works in another sense. In common language time is contrasted with eternity; time, a world of sense and matter, with eternity, a world of spirit; time, a present world, with eternity, a future world.

Examples of such use are abundant. The fleeting phenomena of this world, and especially the brief cycle of our human life in the midst of the infinite unknown abyss from which it comes, and into which it again hastens to be swallowed up, has always pressed heavily, painfully upon the minds of thoughtful men, whether poets, philosophers, or theologians. Shakespeare says, "We are such stuff as dreams are made of, and our little life is rounded with a sleep," as if this our human life were but an uncertain, flickering gleam of phosphorescent light, an ignis fatuus in the midst of surrounding darkness which we strive in vain to pene-Again he says, "Here, on this bank and shoal of time;" as if this our human life were a little spot of more solid matter, visibly emerged from the unfathomable and boundless ocean of eternity.

In a similar sense the word time is frequently used

in Scripture: "And I saw another mighty angel come down from heaven, clothed with a cloud, and a rainbow was about his head, and his face was as it were the sun, and his feet as pillars of fire. And he set his right foot upon the sea, and his left foot on the earth, and lifted up his hand to heaven, and sware by him that liveth for ever and ever, who created heaven and the things that therein are, and the earth, and the things that therein are, and the sea, and the things that are therein, that there should be *time* no longer."

This is evidently the usual sense in which the word time is used. Time, a world of sense, as contrasted with eternity, a world of spirit—a material world whose time is divided into hours and days and years and cycles, whose hours are marked by our clocks, and whose days and years and cycles are marked by revolving planets upon the great dial-plate of heaven; a world whose centre and life and light and warmth is our sun, beyond the reach of whose beams are coldness and darkness and material death; as contrasted with that other world of spirit whose centre is the Sun of Righteousness, within the reach of whose beams are life, and light, and joy; and beyond are outer darkness and spiritual death.

This, as I have said, is the usual sense. It is a time, the time, a cycle of changes. Sometimes it is the cycle of our human life; sometimes it is the cycle of the life of our human race; sometimes it is some intermediate cycle. But in the philosophical sense time is simple duration; it is simply continuity of existence without reference to beginning or end. In this sense, time is a necessary condition of human thought, and therefore

it is impossible to conceive of time commencing at all, or ending at all. In the previous sense, time is a cycle. One time ends, another time begins; the cycle of this world closes, and the cycle of the next world commences. But, in the sense of which I am now speaking, even eternity is but infinite time.

Observe, then, there are two conditions of finite thought—space and time; we cannot conceive of existence out of these two conditions. As we speak of finite space and infinite space, so we speak of finite time and infinite time or eternity. We speak of God as existing in all space, so also we speak of Him as existing in all time; we speak of Him as omnipresent in space, so also as omnipresent in time. We speak of Him as unconditioned by space, so also we must believe that He is unconditioned by time.

Let me draw your attention to the extremely limiting nature of this condition which we call time. Observe how much more limiting it is in its character than space. Space is infinitely extended in all directions; time, like a mathematical line, is infinitely extended only in one direction. Again, we have power over space, we change our place and move about in space; in these latter times we even boast of annihilating space by our railroads and telegraphs. over time we are absolutely powerless; we cannot move backward or forward in this single narrow line. whole life and activity are confined to this one spot in time—this mathematical point, which we call the present. Again, we come in contact with much space directly through our senses, especially through the sense of sight. We stand on the mountain-tops, and,

with a sweep of the eyes, come in sensible contact with hundreds of miles. We sweep our eyes across the starry heavens and come in actual, sensible contact with millions, even thousands of millions of miles; the telescope gives still more extensive contact with space: so that we might almost say we are in sensible contact with infinite space. But time, how different! We come in sensible contact only with the now. The past we realize only through memory, not sense; the future we realize only through the imagination, not sense. Again, once more. Real existence for us is in all space; but in time is only now. That which is past was, but is no longer real existence; that which is to come is not yet a real existence.

Time, therefore, is far more limiting than space. has been often and very properly compared to a current, to a stream on the surface of which we helplessly float. We can neither go backward nor forward, neither this side nor that, but simply drift helplessly, our whole life and activity being confined to the little skiff in which we float. Now, can we believe that He, the Infinite One, also thus drifts upon the stream of time helpless: the only difference between Him and us being the length of the stream? Impossible! No; He alone is unconditioned by time. To Him in his essential nature there is no such thing as time—as now or then—as past or present or future. But to us this is inconceivable. Existence unconditioned by time is even more inconceivable to us than existence unconditioned by space. Our minds and thoughts are more limited. more imprisoned, more "cribbed, cabined, and confined," by this condition than any other. Such existş

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ence is, therefore, the most inconceivable of all. The attempt to think it brings us most directly face to face with the unconditioned, and produces the most utter mental paralysis. It is inconceivable, but not therefore unbelievable. It lies in the domain of faith, not in the domain of thought. Thought carries us inevitably to its very borders, but is powerless to enter.

The highest we can clearly conceive, then, is existence throughout infinite time past and future. Higher even than this, however, is expressed in the language of Scripture quoted. It is not, Thou hast been from everlasting and wilt be to everlasting; but "From everlasting to everlasting thou art." It is the universal present, or omnipresence in time. But in the light of the absolute there is a view higher even than this, viz., that He is in his essential nature unconditioned by time. But, since this is inconceivable to us, He has revealed himself to us in time.

The next attribute, and the last of which we shall speak this evening, is

Unchangeableness.

In the language of Scripture, He is "without variableness or shadow of turning," "the same yesterday, to-day, and forever." I have little to say in illustration of this attribute, for the reason that it is involved in what I have already said. Change, changeableness: this is the language of time—change can only occur in time—but He is unconditioned by time, and therefore cannot change. This is the absolute point of view, but for that very reason is incapable of illustration. In

Nature He reveals himself to us in time and space. Let us, then, come down one step lower in order to illustrate this attribute. As omnipresence in space necessitates the same laws and forces in every portion of space, i. e., invariability of law throughout all space, so also omnipresence in time involves the idea of the same laws, the same forces, and the same plan throughout all time, unchanging and unchangeable, the invariability of law throughout all time. Now, these two essential attributes which I have thus far spoken of, for there are but two, the last being so closely connected with the previous one—these two, viz., omnipresence and eternal unchangeableness, are magnificently revealed in nature, especially in the two departments, Astronomy and Geology. Let me show this:

We have said there are two fundamental conditions of material existence and of human thought, viz., space and time. We cannot even conceive of existence out of these two conditions. Now, the domain of Astronomy is space, the domain of Geology is time. Other sciences indeed deal with space, limited space; but it is the prerogative of Astronomy alone to deal with infinite space, so also other sciences may deal with time, limited, finite time; but it is the prerogative of Geology alone to deal with infinite time. As Astronomy is limited in time to the present epoch but unlimited in space, so also Geology is limited in space to the surface of our earth, but unlimited in time.

So much for their domains. Now, the object of all science is to establish the universality of law; harmony in the midst of apparent confusion, unity in the midst of infinite diversity; unity of force in the midst of

diversity of phenomena, physical science; unity of thought and plan in the midst of diversity of form and expression, natural science; in a word, the unity of Deity in the midst of the infinite multiplicity of Nature. A vague perception of this unity has always existed in the highest intellects, but it is the prerogative of science alone to demonstrate it. This I have said is the object of all science. But it is the prerogative of Astronomy alone to demonstrate this absolute unity of Deity throughout all space, and of Geology alone to demonstrate the same throughout all time. As Astronomy shows that the same force and the same law which control the falling of a stone guide the stars in their fiery course; even so Geology shows that the same law which governs the development of the embryo from the germ to maturity has governed the evolution of the earth and the organic kingdom from primal chaos until now; the same mind which now controls the one. has presided through infinite ages over the other—no new law, no change of plan, the outline of the grand whole is seen in the first strokes of the Divine Artist's pencil, and the ceaseless activity of Deity has been exercised only in the eternal unfolding of the original conception. Thus, as Astronomy binds the whole universe of space about the throne of God by the universal law of gravitation, so Geology binds the whole universe of time about the same fixed throne by the no less universal law of evolution. If Astronomy demonstrates the presence of the same divine energy throughout all space. Geology demonstrates the presence of the same unchanging divine energy throughout all time. Astronomy illustrates, yea, more, demonstrates that

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glorious attribute of Deity, his omnipresence in space, Geology demonstrates that equally essential and glorious attribute, his eternal unchangeableness, his omnipresence in time.

LECTURE VL

ATTRIBUTES OF DEITY.

My Christian Friends: I wish this evening to take up very briefly the remaining essential attributes, and then pass on to the *moral* attributes of Deity. I say very briefly, because, after what I have already said of the absolute, unconditioned being of Deity and of those attributes most closely connected with this, viz., omnipresence in space, and omnipresence in time, nearly all I could say of the remaining ones must be anticipated in your thoughts.

Omniscience.

The highest point which we can clearly reach in our human conception of this attribute is that of absolutely perfect knowledge of all things in all places and in all times, past, present, and to come; in other words, a perfect knowledge of all things and all events in the universe of space and in the universe of time. But in the light of the absolute it means much more than this; for in this definition we have used the language of space and time, and He is unconditioned by either time or space.

You will remember that in my last lecture I said

that what we call the forces of Nature are nothing else than the omnipresent and ceaseless activity of the Divine will; that what we call the laws of Nature are but the modes of operation of the Divine will in carrying out the Divine thought; perfect because He is perfect, invariable because He is unchangeable; and that what we call the objects and events of Nature are but the revealed or realized thoughts of Deity; in a word, that the whole universe of space and of time is but the thought of Deity realized through his will. You will remember, also, that in a previous lecture I stated that there have been philosophers who, going into their closets, shutting their eyes and ears, and turning their thoughts inward upon themselves in deep meditation, have arrived at the conviction that this external world is but a phantasm of interior states of the mind projected outward by a law of the mind itself. Now, what has been vainly imagined by these philosophers as true of man, is, it seems to me, really true of Deity. The whole universe of time and space, the whole external world, is so much of the Divine thought as has been realized by the Divine will.

It follows, then, that what we call the external world is not external to Him as it is to us; not external in the sense of being independent of his thought and will, and therefore something to be acquired by study or by intellectual processes of some kind. In other words, his knowledge is not exactly like ours, only more perfect; it differs not only in degree but in kind. The whole sum of possible human knowledge is so much of the Divine thought as is revealed in Nature and in Scripture. The sum of actual human knowledge

ATTRIBUTES OF DEITY.

is so much of revealed truth as has been acquired by intellectual processes. But his knowledge is something quite different from this; our knowledge and our thoughts are of things; his thoughts become things; our knowledge is acquired; his knowledge is original and essential; our knowledge is therefore partial; his knowledge, by its very nature, must be absolutely perfect. All our human knowledge and our thoughts are but crumbs which fall from the full table of Omniscience.

Such knowledge is, indeed, too wonderful for us. It is high, we cannot attain unto, we cannot even conceive of it. It enters into our inmost heart and mind, into our most secret thoughts and feelings, even before they emerge upon the surface of consciousness. knowledge is, indeed, too wonderful for us; but is it also dreadful to us? or is it not rather joyful to us? We may desire to hide our inmost thoughts and most secret feelings from our fellow-men; some of them even from those we love most dearly; but the true man, the man who really and earnestly desires his own moral improvement, cannot desire to hide them from the allsearching eye of God; for how then can his own heart be revealed to himself? He who would conceal any thing from His eye, would also conceal it from his own eye. If he would deceive Him, he would also deceive himself. If he is untrue to Him, it is because he is untrue also to himself.

The next attribute which we take up is

Omnipotence.

In the glowing language of the Old Testament, it is said: "He looketh on the earth and it trembleth;

he toucheth the hills and they smoke." Again: "It is he that sitteth upon the circle of the earth, and the inhabitants thereof are as grasshoppers; that stretcheth out the heavens as a curtain, and spreadeth them out as a tent to dwell in." "Behold the nations are as a drop of a bucket, and are counted as the small dust of the balance: behold he taketh up the isles as a very little thing." In the more direct language of the New Testament addressed to the intellect and the heart rather than the imagination, it is said: "To man this is impossible; but to God all things are possible."

Now, the highest view which the human intellect can take of the Divine Omnipotence is expressed in the word almighty, i. e., power which is infinite and irresistible, and which, therefore, it is mere madness and folly to oppose. But from the absolute point of view it is much more than this: it is a power which reaches its results without effort—a power to which there is not, and cannot be, any opposition. In the whole realm of Nature there is not even seeming opposition, except in the will of man; but even in the will of man opposition is only a moral attitude, and not an effective resistance. In the case of finite forces concurring with or opposing one another, the effective result is the sum or difference of the two forces; but man's force, concurring or opposing, cannot increase or diminish the effect of the Divine will, for He is the sole source of all power. All life, all work, all energy, all human activity, which is opposed to the Divine will as expressed in the Divine law, is self-destructive—is simply wasted and ends in mere nothingness. Only



¹ Psalm civ.

² Isaiah xl.

that finite force is effective which is in accordance with Divine law, and then only because Divine law operates in that direction. Is it not so in the realm of external Nature? Human activity, which operates contrary to the Divine laws in Nature, we all know necessarily wastes itself and accomplishes simply nothing; only that which operates in accordance with law effects any useful result. In fact, in all our activities, we, by our will, only determine the direction of operation of Divine laws and Divine forces. Now, the same is true, though perhaps less obviously, in the moral world and of moral laws. We may seem to resist the Divine will, but in the end it will always be seen that all activity and every life which is contrary to the Divine moral law must necessarily be simply wasted and selfdestructive. Only that life and that activity can be effective which is in accordance with Divine law, and then only because the Divine will acts through us and by us to accomplish the result.

We pass next to the subject of the divine

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Incomprehensibleness.

"Canst thou by searching find out God? Canst thou find out the Almighty unto perfection? It is as high as heaven, what canst thou do? deeper than hell, what canst thou know?" Such is the language in which Scripture describes this attribute.

Although an essential characteristic of Deity, and usually classed among the essential attributes, this can hardly be called an attribute in the proper sense of the term. It is rather the relation of all his attributes to

our finite minds; in other words, the relation of the infinite to the finite.

But some will say: "If He is incomprehensible, how can we worship Him rationally? Blind worship is possible toward that which we cannot understand, but rational worship is impossible." On the contrary, it is only of such a one that rational worship is possible. In order to worship rationally, we must indeed be able to apprehend, but we must not be able to comprehend. We must be able to take hold of, but we must not be able to inclose and determine the limits of the object of our worship. In order to worship Him rationally, we must be able to lay hold of and cling to Him, even if it be but the lowermost skirts of his outer garment, but we must not be able to embrace, except only his feet.

We love that which is like ourselves and which we can also entirely comprehend; that which is on our own level, or even below us. It is thus we love our friends and our children. We love and reverence that which, though like ourselves, is above us, but not beyond our comprehension. It is thus we love and reverence the wise, the great, and the good, among our fellow-men. But we love, reverence, and worship, only that which is still like ourselves, but which is not only above us, but in its highest parts incomprehensible to us.

Now, precisely such a one is revealed to us as the object of worship both in Nature and in Scripture—like ourselves, yet infinitely above us. We have already compared a work of Deity with a work of man, and shown their similarity, and yet the infinite superiority of the former. It is like up to a certain point, and then it passes beyond, from the finite to the infinite. So the

nature of Deity is spirit as man is spirit, and his attributes all have their correspondence in man, with the difference that the one is finite and conditioned, and the other infinite and unconditioned. Thus Deity, as revealed in Nature, in Scripture, and especially as revealed in Christ, stands, as it were, on the same level with us, but reaches infinitely above us. And, as we turn upward our faces and gaze higher and higher, straining our eyes to catch a still higher view, He passes beyond our sight into the infinite. But, even when the straining vision fails, the heart still yearns upward in love and reverence and worship. be like ourselves, or how shall we apprehend Him, take hold of Him, cling to Him, and love Him? He must be incomprehensible to us, or how shall we rationally worship Him? From the very nature of Deity, therefore, there must be, in every revelation, a comprehensible and an incomprehensible—in every revelation there must be a region of mystery. There are mysteries in Nature, there are mysteries in Scripture. There must be mysteries real or apparent in all religions, true or false, for worship is impossible without mystery. But the difference between the false and the true revelations is this: the mysteries in the one case are founded on our ignorance, in the other case on the limitation of our faculties. Increasing knowledge. therefore, dissipates the one, while it only increases the incomprehensibleness of the other. In every true revelation of Deity, in proportion as we increase the area of the comprehensible, in the same proportion do we bring our minds into more extensive and closer contact with the outlying region of incomprehensible mystery;

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in proportion as the circle of light—the circle of the known—increases, in the same proportion increases also the circumference of darkness—the unknown and unknowable. This uplifting of the whole being toward the Infinite, the up-looking of the eye, the up-looking of the mind, and the up-yearning of the heart—this is worship. It is the noblest posture of the human body—it is the noblest condition of the human mind. This posture cannot be rationally assumed except to one who is like us, and yet incomprehensible to us.

Moral Attributes of Deity.

We pass now to what are called the moral attributes of Deity—viz., Wisdom, Truth, Justice, Love, Holiness. These are the second step from the absolute—where He dwells apart in light unapproachable—the second step in the downward flow of revelation toward man. In these the Deity reveals himself in more human form, and of these, therefore, we will speak in a more human way. The first of these of which I shall speak is

Wisdom.

I speak of this first, because it forms the natural transition between the essential and the moral attributes. For, as human wisdom is human knowledge or human science practically applied to attain human ends, so the Divine wisdom is Divine omniscience operating to carry out Divine ends.

Now, as already indicated by what I have just said, there is a great difference between science and wisdom. Science seeks truth for its own sake; wisdom seeks truth in order to use. Science is abstract; wisdom is

the concrete embodiment of science. Science exercises the intellect only; wisdom exercises in addition always the will, and in its higher manifestations also the heart, in other words the whole life and activity of man. The opposite of the one is ignorance: the opposite of the other is folly.

Wisdom, therefore, being the right application of knowledge in carrying out an end, is evidently a product of two factors, knowledge and power. Now, it is a curious fact that in the field of human wisdom, these two factors seem to have an inverse relation to each other. In comparing different departments with each other, we find that, in proportion as human knowledge is more perfect, human power to modify phenomena and control the course of events is less; on the other hand, in proportion as our power over natural phenomena becomes greater, our knowledge becomes less. Thus human wisdom is limited on both sides; on one side by want of knowledge, on the other by want of power. Let me illustrate my meaning:

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As we pass in the scale of sciences from the simpler to the more complex, our knowledge of phenomena decreases, but our power to modify phenomena increases. Thus, in astronomy, we study the heavenly bodies in their courses until we may know the law of every motion so perfectly that we can predict with unerring precision the position of every star during next year or even during the next century. But we cannot modify in the slightest degree the phenomena, or change in the least the course of events. We cannot touch one wheel of this complex mechanism. This is not the field of human wisdom. Wisdom there is,

indeed, but it is divine, not human. In this department we are observers only, not experimenters. We can simply gaze, admire, and worship.

But, as soon as we pass, beyond astronomy into the more complex departments of physics and chemistry, as soon as we pass from the simpler phenomena of gravitation to the more complex phenomena of physical and chemical forces, our power over phenomena commences, but our knowledge of phenomena decreases. We experiment—we modify phenomena, and determine the course of events, but we cannot now so perfectly foresee the course of events. Nevertheless, it is probably in these departments that knowledge and power are most evenly balanced, and here, therefore, the most perfect application of human science, the most perfect examples of human wisdom, are to be found. Only, in these simpler departments of human knowledge, we do not usually call the practical application wisdom, but only skill.

Again, if we rise one step higher into the department of Organic Science, and the still more complex phenomena of life, our power to modify phenomena and determine events is still greater; but alas! our ability to foresee and direct the course of events is far less than before. Our power is so great and our knowledge so small that the exercise of power becomes dangerous. We can scarcely touch without modifying greatly, and perhaps fatally. Here, then, evidently, is wanted a far higher order of skill—a skill which now begins to lose the name of skill, and to assume that of wisdom. But here, also, commences the domain of pretended wisdom—charlatanry.

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If we pass now to a still higher and more complex group of phenomena, the phenomena of social life, the phenomena of the social organism, of the body politic, our power to modify phenomena becomes still more fearful, while our knowledge of these laws, and therefore our ability to foresee the result of any modification, is still less than before. In our blundering attempts to cure the diseases of the body politic, in our foolishly confident attempts to better the condition of the social organism, how often do we introduce disturbing elements which result in the most disastrous and unforeseen consequences! Here, then, is the favorite field of charlatanry and pretense; but it is also the noblest field of human wisdom. But there is a still higher department of knowledge, viz., the science of our higher moral and spiritual life; and a still higher wisdom, viz., the application of this knowledge in the conduct of our higher life. This is, indeed, the highest wisdom, and here, alas! we find the most deplorable charlatanry, pretense, cant.

To illustrate still further the difference between science and wisdom: Suppose a spectator far removed above the earth, and gazing with deep intellectual interest upon the complex phenomena of human society, as the astronomer gazes upon the phenomena of the heavenly bodies, watching calmly social movements and revolutions, reducing them to laws, and determining their forces: this is science. But, suppose the same spectator, moved with deep sympathy with the actors, should descend from his elevated position upon the scene of action; no longer now a spectator only, but also a noble actor, no longer an observer of phe-

nomena only, but also a producer of phenomena, influenced by others and influencing others for gcod: this is now no longer the field of science only, but of the highest wisdom; not only is the intellect now involved, but also the will and the heart—the whole life.

Wisdom, then, in its widest sense, is the right application of knowledge to attain ends; but, in its lower types, we call it skill; only in its higher types we call In this higher and more restricted sense we would define wisdom as the use of knowledge in the right conduct of life. It is life according to reason, in other words, life according to Divine law. Is it not obviously so in the realm of external Nature? · Activity according to Divine law in Nature is the only wisdom; it only accomplishes its results. Activity in the realm of Nature which is opposed to the laws of Nature is sheer folly, for it is either self-destructive or else a mere waste of energy. So is it precisely in the moral and spiritual world. Activity according to Divine law is the only true wisdom; activity in opposition to Divine law, in the deepest philosophic sense, is sheer folly; it must, of necessity, be self-destructive or wasted. It is in this sense, the deepest and truest sense, that the words wisdom and folly are always used in Scripture.

We have seen, then, how human wisdom is limited on both sides, limited on the one side by want of power, limited on the other by the want of knowledge. But, the Divine wisdom is not thus limited—it is the product of the Divine omniscience and the Divine omnipotence, and is therefore perfect in degree and infinite in extent. In fact, in the deepest sense, there is no other wisdom but the Divine wisdom. As our minds are but sparks of the Infinite intelligence, as our sciences are but the crumbs of Divine omniscience: so our wisdom is but a fragment of the Divine wisdom. Our wisdom is wisdom only in so far as it is in accordance with, or an image of, the Divine wisdom.

I have said that wisdom is the right use of knowledge in the attainment of right ends. Now, the question occurs, "What is the end of the Divine wisdom?" Human wisdom always has many ends; some lower and more immediate, and others higher and more re-For instance: every one of us, in our daily life, has one immediate end in view, viz., our daily duties and our daily bread. Beyond this, more remote and higher, there is always another end, viz., the gradual bettering of our worldly condition. Beyond this, again, if we be true men, there is still a higher end-not bounded by the cycle of our own individual life, but terminating in the life of our race—the gradual development of humanity. Beyond this, again, if we be really true men, there is another highest end which terminates, not on this earthly life, but has reference to the eternal and spiritual life of ourselves and our fellow-men.

So is it also with the Divine wisdom. It has its nearer and more immediate ends, and its higher and more remote ends. For instance: in the mechanism of the heavens the immediate end in view is use—stability and regularity in marking days, and years, and cycles. Beyond this there is another and higher end, viz., beautiful orderly arrangement, for order's sake. Beyond this there is a still higher detectible end: for our solar system is but one part of a complex cosmos—its move-

ments are, therefore, subordinate to the gradual development or cyclical movement of the whole. So also in the mechanism of the animal body there are many The immediate end of its structural contrivance is use in the battle or struggle of life. Beyond this there is a higher design, viz., conformity to a preordained plan of structure. Beyond this is a still higher end, for every organism is but one link of a connected chain—one step in the march of evolution of the organic kingdom; an evolution which finds its term and crown in the human body as the habitation of an immortal spirit. In the dealings of Providence with the Church, I believe the same law may be traced. The immediate object of the splendid symbolism of the Jewish ritual was evidently to impress the imagination of a sensuous people for good. Another higher and more remote object, however, was evidently a symbolizing of Christ and the Christian Church; and a still more remote end was the symbolizing of the glories of the future world.

Now, among the various ends of Divine activity—of Divine wisdom, rising higher and higher until they pass out of view—which is the last and highest? I do not hesitate to answer: The Divine glory itself. It is the answer of Scripture; it is the answer of Nature; it is the answer of Philosophy. But some will ask, "Is the God of Christian worship selfish, then? Does his whole activity terminate on self?" I wish, therefore, to show that the Divine wisdom cannot worthily terminate on any other as its highest end, but that, nevertheless, He is not selfish in the sense in which we use that word in reference to man.

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Suppose, then, a man of splendid endowments of body, mind, and soul; suppose such a man should expend all his energy and all his great powers on some trivial object as the highest end of his life; such, for example, as the training of monkeys or dogs. not at once feel that such a nature is degraded? Suppose, next, a man similarly endowed should devote his whole energy and life to the cultivation of his lower self, to the training of his body to the highest degree of strength, activity, and manly beauty: we recognize at once that this is a higher end of activity, and this a nobler life than the other. It is impossible for us to withhold our admiration of the result: for the perfect human body is the glorious symbol of the perfect hu-This is the end of life from the animal man spirit. point of view. Suppose, next, the same energies directed, in addition, to a higher object: the cultivation of the intellectual and moral nature—the training of all our powers-bodily and spiritual, our powers of intellect, will, and heart—to the highest degree and in perfect harmony with each other, so that our whole nature shall act freely, spontaneously, joyfully together, not for use, indeed, but for glorious display. We recognize now a still nobler life. This is the end of life from the æsthetic point. It is, indeed, a glorious life, but not yet the highest. Suppose the same life and energy terminating not even upon our nobler self, but upon a still higher object, humanity. This is philanthropy the end of life from the moral point of view. There is still a higher life and the highest: it is that which terminates only on the highest, which devotes itself first of all to the service of God. This is the end of life from the religious point of view.

Observe, then, first, that the nobleness of a life is determined not by whether it terminates inward or outward, but solely by the nobleness of the object upon which it terminates. The termination of our activity on self is not the noblest activity, only because there are far nobler objects on which to terminate.

Observe, again, that higher ends usually include all lower ends, and therefore, in attaining the highest, we attain, as far as it is possible, all the lower worthy ends of life. Let me illustrate: We have said that culture of the whole nature—body, mind, and heart—culture for culture's sake, is really a noble end of life. It should be, if not the predominant, at least a prominent end of activity in childhood and youth. But, after we arrive at the period of manhood, unless our activity turn outward upon something higher than ourselves, we never attain even the highest culture. We cannot attain the highest culture by seeking culture only, but rather by striving to impress that culture upon our fellow-men. The higher end includes the lower; we attain the lower most perfectly through the higher. Solomon, because he prayed not for riches, nor power, nor knowledge only, but wisdom to judge the people, therefore received wisdom, but there were added also knowledge, and power, and riches. So is it with us if our activity terminate primarily upon the highest, viz., God; we thereby in the most perfect manner bless our fellowmen, and attain for ourselves the most perfect culture which belongs to man.

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You will at once see, then, that the highest end of Divine wisdom and Divine activity can be nothing short of his own glory. Any thing beneath this, as

his highest end, must necessarily degrade Him. only so, but this highest end includes every other conceivable inferior end. For as man best blesses his fellow-man by making the Divine Being the highest end of his activity, even so the Deity confers every conceivable blessing upon man by simply glorifying himself by the free exhibition of his glorious perfections, in a word, by self-revelation; and, furthermore, we cannot even conceive how otherwise He could bless man. Thus, as Dante gazing upward into the eyes of Beatrice, the symbol of Divine beauty, and only while he gazed steadily, was drawn upward from heaven to heaven, even so, we, as we gaze upward upon Him the Infinite, as revealed in Nature, in Scripture, and still better, because nearer to us, as revealed in Christ, are drawn upward, higher and ever higher.

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LECTURE VII.

TRUTH.

My Christian Friends: You will remember that, in my last lecture, I had commenced to speak of the moral attributes of Deity, and had taken up one of them, viz., *Wisdom*. The subject of my lecture this evening is *Truth*.

"' What is truth?' asked jesting Pilate, and stayed not for an answer." But the answer which was not given to jesting Pilate, was given by the Divine Master, but a few hours previous, to his loving and trusting disciples. You will remember that, in his last prayer for his disciples and the Church, he said: "Sanctify them by thy truth; thy word is truth." Now, what is meant here by "thy word?" I suppose most persons would answer unhesitatingly "The Scriptures.". That it refers primarily to this I have no doubt; but I have long been convinced that it has a deeper, broader, and more philosophical meaning than this. The Divine word comprehends all revelation or manifestation of Deity; revelation in Nature, revelation in Scripture, revelation in Christ. In this more comprehensive sense not only is the word of God truth, but there is, for man, no other possible truth. Let us bear in mind, also, that

we have it from the lips of the Divine Master, that all truth is sanctifying. All that I shall say this evening will be in illustration of this profound saying, "Thy word is truth."

Abstract truth is objective reality. But objective reality is nothing to us unless it is reproduced in our minds and in our wills. This only is truth for us. Truth, then, for us, is of several kinds. First. Truth is the accordance of our thoughts with objective reality. This is truth in the realm of thought, philosophic truth, scientific truth; the opposite of this is error. Again: truth is the accordance of our words and conduct with our thoughts-the accordance of the exterior manifestation with the interior condition—the revelation of our This is truth in the realm of will; interior states. truth as a moral quality; truthfulness in word, honesty in conduct, sincerity in character. The opposite of this is falseness, dishonesty, insincerity, dissimulation, affectation, and, in a lesser degree, all the vain pomps and pretentious shows of this world, by which we so often impose on ourselves and on others. Again, in the third place, truth is the accordance of conduct now with words spoken in TIME PAST. This form differs from the last only in introducing the element of time. With increase of knowledge and changed conditions there may come also a change in our interior states and thoughts, and therefore a word spoken which was not untruthful in the second sense, i. e., was accordant with our thought, may be discordant with our present thought, and therefore with conduct based upon our present thought. This form of truth is called faithfulness, trustworthiness, reliability, promise-keeping, and

its opposite, unfaithfulness, unreliableness, etc. The want of this form of truth may not indicate so great moral obliquity as the second form, but it certainly indicates fickleness of purpose, weakness of character, and a feeble sense of moral obligation.

Thus defined, truth forms the very basis of human character, and the best gauge of human excellence: truth in the realm of thought, of intellectual excellence—truth in the will, of moral excellence or virtue.

We come now to speak of truth as a Divine attribute. Observe, then, that abstract truth is objective reality; but objective reality is nothing but the realized thought of Deity.¹ Evidently, therefore, the Divine thought and objective reality, standing as they do in the relation of cause and effect, must of necessity be in perfect accordance. Therefore, the first form of concrete truth—truth in the realm of thought—must be an attribute of Deity. It follows from a just conception itself of Deity.

Again, external Nature is not only the realized thought, but it is also the word of God—the sensible manifestation or expression of the Divine thought—literally, a revealed word. Thus, in Nature, we have not only accordance but a complete identification of the Divine thought and the Divine word with objective reality, and thus the second form of truth as a Divine attribute follows as a necessary consequence of a just conception of the Divine nature.

Let me illustrate further the truthfulness of this word of God. Nature, as I have said, is literally a revealed word—a word written in picture-characters,

¹ See previous lecture, p. 98.

symbolical characters, hieroglyphics having a necessary and eternal significance, which it is the duty of science to interpret. The whole object of science is to construct the theology of this Divine revelation. This Divine word never deceives us, makes no mistakes, is never inconsistent with itself. We have here invariable laws everywhere, the same to all persons and in all places. We may, indeed, be deceived, but, if so, we are sure that we have deceived ourselves. There may seem to be mistakes and inconsistencies, but we at once attribute it to our false interpretation—our We never for a moment think of acfalse exegesis. cusing Nature of falsehood, but only ourselves of false reading; and we therefore correct our reading so as to bring it into accordance with the revelation. We may be mistaken again and again: we correct our reading again and again, in accordance with our increased knowledge of the revelation. Such changes of interpretation - such changes of our reading of Nature -mark the whole history of science. Science is not ashamed to acknowledge her mistakes nor to change her readings. Now, if we accept Scripture as a revelation at all, let us accept it in the same frank spirit as we accept Nature.

The third kind of truth, you will remember, is accordance of conduct now with words spoken previously. Now, this also is involved in the very nature of Deity. For, observe, our unfaithfulness comes from ignorance, but He is omniscient; or else from fickleness, but He is unchangeable. Let me illustrate this also from Nature: I have spoken of invariable law throughout all space as the expression of Divine truthfulness. But there

is also invariable law throughout infinite time; this is the expression of the Divine faithfulness. In the gradual evolution of the cosmos, of the beautiful order of the universe throughout infinite time, there is not a promise but is redeemed, not a prophecy but is fulfilled. If it seems not so to us, we know that it is because we are mistaken as to the nature of the promise or the prophecy. We never think of accusing Nature, but only ourselves, of mistakes. We may find ourselves mistaken once, twice, many times: we only alter our readings, and thus gradually bring our thoughts more and more in accordance with the revealed Divine thought. Is not this rational? Is any other course than this rational?

Now, I again repeat, if we accept the Scriptures at all as a Divine revelation, let us accept them in the same frank spirit of undoubting trust. There may sometimes seem to us to be a mistake; there may be sometimes apparent inconsistencies. Let us conclude that it is because our interpretation is false—we must change our reading. We find another inconsistency with other Scriptures or other revelations—we must again change our reading, in the one case or in the other, according as our minds become more enlightened by the study of all revelations, and understand better the Divine thoughts.

Truth, then, is: first, the Divine thoughts objectively realized; second, the accordance of our thoughts with objective reality, i. e., with the Divine thought; third, a secondary revelation of our thoughts in words and acts. I wish now to apply these principles practically to human life, and show the duty and the spirit

of truth-seeking, taking my illustrations principally, of course, from my own favorite field, Nature.

I assume that man is endowed with a spiritual nature, which is an image of the Divine nature. In other words, man is made in the image of God. If we do not admit this proposition, we cannot stop short of blank materialism, and our human life has then no longer any significance different from that of other ani-If we do not admit this proposition, we destroy at one blow all our noble aspirations of every kind, religious, moral, and intellectual, and also the very conditions under which these lectures were conceived. I am compelled to assume the truth of this proposition, and shall assume it explicitly or implicitly in every one of these lectures. Now, if man is indeed made in the image of God, the whole significance of human life consists in restoring or perfecting the Divine image in human nature. Moreover, if we believe in a personal Deity, who is also our spiritual Father, we must believe that God and man coöperate in this great work of res-God and man must work together to restore the Divine image in the human reason as truth, in the human will as holiness, in the human heart as love. In all this work, God's part is the free revelation of himself, the display of his glorious perfections in Nature and in Scripture; man's part is, by the study of these revelations, and the intense yearning after these perfections, to bring his nature in accordance with the Divine na-We are now in this lecture, however, concerned only with the work of restoration of the Divine image in the human reason as truth.

The symbol of truth is light. It is a beautiful say-

ing of Bacon, that of the Divine days of creation, the first day's work was light, the last day's work was still light, and the Sabbath day's work has been ever since only—light: the first day's work physical light, the light of sense; the last day's work, the light of reason, the planting of his image in human nature; and the Sabbath day's work ever since has been and ever will be the illumination of the Divine Spirit-and thus the brightening and perfecting of that image. This is the Divine work. Now man's work is to cooperate with Him-to seek light, to seek truth. If God's work is to shed light, man's is to receive light and reflect it on others; if God's work is to reveal truth, man's is to attain truth and impart it. The seeking and the attainment of truth is, indeed, the process of restoring the Divine image in the human reason. Therefore we should seek truth not for pride or power—that we may be like gods, knowing good and evil-nor for vanity, nor even primarily for utility; but because we thereby become partakers of the Divine thought, and in so far partakers of the Divine nature.

Now, I have just indicated above the two wrong ends of truth-seeking: one is truth-seeking for pride—that we may be as gods; the other is truth-seeking for utility. The end in the one case is culture, intellectual strength, and beauty, for ourselves; the end in the other case is material prosperity and wealth. The error in both cases consists in the termination of activity on self, and in the non-recognition of the essential nature of truth as the Divine image in the human reason. The one is the error of the metaphysician, the other is the error of the worldly-minded and the mate-

rialist. We will take up first the error of the metaphysician.

All distinguished metaphysical writers advocate the view that the end of mental activity is not truth, but culture; that exercise is better than truth, that activity is better than attainment. Nearly all metaphysicians, from Aristotle to Sir William Hamilton, have dwelt on this point, and some of the most magnificent and glowing passages of these great writers are in vindication of this proposition. Hamilton likens truth to game, and the process of attaining truth to a chase: the exercise of our powers is far better than the game which we so ardently seek. Lessing, far more bold, says: "If the Almighty, holding in one hand truth and in the other search after truth, presented them to me and asked me which I would choose, with all humility but without hesitation I should say, give me search after truth." Malebranche says: "If I held truth captive like a bird in my hand, I would let it go again, that I might again chase and capture it." Does not this remind us of children chasing butterflies? Müller says, "Truth is the property of God alone; search after truth belongs to man." Yes, that which metaphysicians mostly search after, viz., essential truth, does indeed belong to God alone. But science would formulate the same proposition thus: essential truth belongs to God alone; revealed truth—truth revealed in Nature and in Scripture—belongs to man.

Thus Metaphysics ever strives after essential truth, after the unattainable, and of course fails; and then she comforts herself with the idea that the activity of this search is better than the truth itself. These

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intellectual Titans would scale the very heavens, and are of course thrown back to earth. "It matters not: scaling heaven is excellent exercise for intellectual Titans." Truth hangs like beautiful grape-clusters far beyond our reach; the grapes may be sour, at least they are too high. "It matters not: jumping is good exercise." Truth is a beautiful rainbow spanning the heavens at a distance, with a treasure beneath it; we poor children run ever toward it, but, as we approach, it ever flies before us. "It matters not: running is excellent exercise for children." Yes, it is good exercise; but, alas! our weary legs and our deceived hopes.

Thus Metaphysics deludes us with promises of essential knowledge, of food of the gods; cheats us with gilded apples full of ashes. Is it indeed thus, then? Is truth, indeed, unattainable? Are we to be ever thus cheated and deluded in our search after truth? By no means. The mistake is, that Metaphysics, at least the older Metaphysics, seeks after the unattainable; and therefore the advantage of metaphysical studies is indeed only mental activity; and it will continue to be so until scientific methods are adopted by her.

Let us examine a little more closely the proposition by which Metaphysics seeks to magnify herself, and place her own department above all others in importance. Observe, then—the proposition is that activity, or exercise of our powers, is the main advantage of truth-seeking—that truth-seeking is strictly comparable to a chase after game, or to athletic sports of any kind, in all of which we admit that exercise of human powers is far more important than the insignificant end after which we temporarily seek. But truth-seeking is not

comparable to athletic sports, and such comparison mistakes the nature of truth entirely. In sports and in the chase we exercise our immortal powers, in attaining purely temporal and trivial ends. In such cases, of course the activity is better than the end. The very word sport implies this. But, as soon as the end which we seek is the Divine thought, the words sport and game are no longer admissible—to the earnest truthseeker they savor almost of blasphemy. In truth-seeking, both the end and the exercise are of great importance; but already the end is superior to the exercise. If we next rise one step higher, to the seeking of moral and religious truth and spiritual blessings, the process, or means, are simply swallowed up in the infinite importance of the end. Suppose we should apply Lessing's aphorism to religious truth and spiritual blessings: "If the Almighty offered in one hand knowledge of God, and spiritual blessings, faith, pardon, holiness; and in the other seeking after these by prayer, even unavailing prayer-I would say give me eternal seeking." Or Malebranche's: "If I had the Holy Spirit in my heart, I would let Him go, that I might again seek after Him." You at once perceive how absurd and blasphemous the aphorisms become.

Now, to all this metaphysical spirit of truth-seeking, science opposes itself with its whole power. To science, truth is the very aliment of the mind. Essential truth, indeed, is not given us, but what is given us is the very food upon which the mind and the soul feed and grow. Science, to be sure, does not offer us essential truth, but it does offer us revealed truth. It does not, indeed, offer us food fit for gods, but it

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does offer us bread. Coarse it may be, and homely, but wholesome bread, such as is suited to our intellectual digestion. Exercise is good, no doubt, but the starving must first have food. Now, science not only gives us food, but teaches us that food-getting is also the best exercise. Exercise is good, but healthy growth is much better, and we grow by food, not by exercise. How different from the metaphysical view is that of Bacon, the father of the inductive method! "The inquiry of truth, which is the wooing of it; the knowledge of truth, which is the presence of it; and the belief in truth, which is the enjoying of it; is the sovereign good of our human nature."

We pass now to the second error, or wrong end in truth-seeking, viz., truth-seeking for utility, for temporal ends, for material prosperity and wealth.

It is a very common idea that the true and only end of science is to embody itself in useful art; that the highest end of science is to clothe us, feed us, and bear us about; to clothe us more magnificently, to feed us more luxuriously, and bear us about with more rapidity, ease, and comfort; that he who consumes his whole life in seeking and attaining truth, and thus bringing his thoughts in accordance with the Divine thoughts, and perfecting the Divine image in his own reason, is sufficiently rewarded for broken health and life consumed, if he haply discovers—not a new law, not a Divine thought, but an improved mode of making spectacles or a new process of reducing metals. this view is not confined to the ignorant, but even the most intelligent think and speak in this groveling way. Yerily, such men would turn this beautiful earth of

ours, the garden of the Almighty, the glorious exhibition of the Divine wisdom and beauty, into a stable or fodder-house; they would pluck the lights from heaven and put them in candlesticks; they would hew down the tree of science to make timber withal, instead of allowing it to blossom and bear fruit for the healing of the nations.

But they who think and speak in this way have no idea either of the dignity of science or of the dignity The true and highest end of science is not to lead downward to art, but upward to the fountain of all wisdom. Astronomy is more to be honored for opening the gates of heaven, and revealing the harmonies of the universe, than even for extending the limits or increasing the safety of navigation. Geology is more to be admired for opening the gates of infinite time, and revealing lost creations, than even for tracing beds of coal or veins of metal. Only it has been mercifully ordered for our encouragement that every step in the higher walks of science shall be attended sooner or later with material benefits; that every law of Nature, besides its higher function of pointing to the great First Cause, shall have also its appointed duty of administering to the material wants of man; that sun, moon, and stars, while they circle about the throne of God, and join their spheral harmony with the songs of angels, shall not forget to bless man in their courses; that streams, whether "adown enormous ravines they rush amain," filling the hills with their joy, and in their perilous fall thundering the praises of God, or bear the image of heaven on their broad, placid bosoms, shall also turn our mills and water our meadows.

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repeat, it is thus ordered for our encouragement, not for our highest reward. Truth is its own unspeakable reward. We must seek it—even if we would be successful in our material applications—we must seek it for its own sake, as the image of Deity.

Finally, let me say that intense longing and ardent seeking for truth for its own sake-truth of all kinds, revealed in Nature and revealed in Scripture—has ever been my life-passion. The one kind of truth, that revealed in Nature, we attain step by step. It is a joy to see the glorious temple of science rise steadily, tier by tier, in beautiful proportions, under the hands of thousands of busy workmen; it is a still greater joy to mingle in the busy throng and join in the noble work. Our theology here is one, our faith here is complete. But ah, how dim is the revelation of those very truths which we wish most to know! How imperfect is its answer to our passionate questionings of whence we come and whither we go! The other revelation is intended to reveal these very things, to answer these very questions; but alas! again, how different our theologies and how feeble our faith! If I know myself at all, I can say that my most passionate prayer, perhaps too passionate, has ever been "Light! light! Show me the truth, and give me unwavering faith in it!" I say, perhaps too passionate, because even this possibly savors of intellectual pride. There is a better, because an humbler prayer, "Show us our duty, and give us strength to do it." With this prayer light will come also. If we do the will of our Father, then shall we also know whether the doctrine be his.

LECTURE VIII.

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JUSTICE.

MY CHRISTIAN FRIENDS: The subject of this evening's lecture is the *Divine Justice*. We have seen in the last lecture that truth abstractly is so much of the Divine thought as has been realized by the Divine will. Truth in man, therefore, is the accordance of the human mind with the Divine mind. A true theory is a formula which truly expresses the Divine thought; a true human thought is one which is an image of the Divine thought. In a word the Divine thought is the standard of truth, and there is no other truth except the Divine thought, and whatever in man is accordant with it.

This point is so important that I think it best to stop one moment, to render it clear by a single illustration:

Organic forms of the animal and vegetable kingdoms are so numerous and diverse that their first effect is simply to oppress and bewilder the mind. The first step in their scientific study is therefore to simplify by classification. Now, we may classify upon many principles, but there is only one true classification, viz., that which groups organic forms according to their true

relations and real affinities. These true relations and real affinities are an expression of what I might call the Divine classification. Our classification is true just in proportion as it embodies these true relations and real affinities—just in proportion as it is natural; in other words, in proportion as it is an image of the Divine classification. With every increase of knowledge of the real affinities of organisms, we modify our classification, making it more and more like the Divine original, but it never can be perfect until our knowledge Every other classification is a mere is complete. human device to simplify Nature, and therefore necessarily artificial and false. There have been such purely human classifications, such human devices to simplify the complexity of Nature, as for example the celebrated Linnæan artificial classification of plants, but, like all things human which are not in the image of the Divine. such classifications serve only a temporary purpose they are speedily found to be untrue to Nature, and therefore rejected. I repeat, therefore, that in all things the only standard of truth is the Divine thought.

The same is true, as we have already seen, in regard to Wisdom. The only real wisdom is the Divine wisdom, and whatever in man is accordant with Divine wisdom; and every other apparent wisdom, which is not thus accordant, is mere folly. So also is it with human power: it is true, and genuine, and effective, only in proportion as it is accordant with the laws of Divine energy. So is it, and must it be, with our whole nature: we are but the reflected image of the Deity and all that is true, or wise, or good, or effective

¹ Lecture V.

in us, is that which is accordant with the Divine original.

The same, therefore, must be true of justice. is really no other justice but that which originates with The Divine will is the rule of right, as the Divine thought is the law of reason. All other justice, so called, which is not thus accordant, must be only apparent, not real. It must be so: it follows as a necessary consequence of a just conception of Deity. How, then, shall we judge the justice of the Divine ways by our reason? Does it not seem a contradiction in terms? Yet man is made in the image of God. Man's reason was given him in order to compare his thoughts with the Divine thoughts, his wisdom with the Divine wisdom, and his justice with the Divine justice. It is right, therefore, for man-it is the domain of human reason—to justify the ways of God. Yes, justify, but not try. The proper attitude of man is, not his truth tried by our reason, but our reason brought in accordance with his truth; not his thought by our thought, but our thought in accordance with his thought; not his justice and his ways by our nctions of justice; but our notions of justice and our ways in accordance with his revealed justice. If we once get a true conception of Deity as we find it in the absolute and in those attributes most closely connected with the absolute, then wisdom, truth, and justice, as Divine attributes, follow as a necessary consequence. We cannot even conceive of Deity as being unwise, or untrue, or unjust: it is a simple contradiction in terms. Furthermore, we cannot conceive of Him except as the source of all wisdom, and truth, and justice.

This, then, is the result of an enlightened interpretation of Nature. But, has Nature always been so interpreted? By no means; this result has only been reached by enlightened interpretation; it is the last and highest term of human thought. Now, this very conception of Deity, as essentially and necessarily just and true, has been revealed to us in the Scriptures from the first. "Shall not the judge of all the earth do right?"

Justice may be defined as the dispensing of reward and punishment in proportion to right-doing or wrong-doing—the dispensing of happiness and misery in proportion to life according to law, or life in violation of law. Writers upon this subject, therefore, have spoken of two kinds of justice, viz., remunerative and punitive justice. Remunerative justice is the dispensing of rewards in proportion to merit, to service, to good work, to life according to law. Now, in strictness, this kind of justice is not for us and would not be, even if we were perfect. This is finely expressed by the most philosophic of modern poets, Tennyson:

"For merit lives from man to man, But not from man, O Lord, to thee."

It is expressed also in many passages of Scripture. "When ye have done all, then say we are unprofitable servants." In other words, merit cannot live between the *finite* and the *infinite*. Hence the happiness dispensed in proportion to life according to law is not in the nature of reward, but is freely bestowed or else comes as a consequence of the regular operation of beneficent law.

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Punitive justice is the dispensing of pain and misery in proportion to life in violation of law. It is sometimes called retributive justice. Now if, by the word retributive, it is intended to imply a spirit of vindictiveness, a spirit of retaliation, which takes pleasure in the pain and misery inflicted, then such a notion of Divine justice is foreign to the spirit of Science; is, in fact, repudiated by her. Punishment in proportion to the violation of law comes by the regular operation of inexorable law itself. This, to the scientific man, is the nature of Divine justice. There may be more than this; but this is what Nature teaches.

Now, there is in the present age, and I think rapidly growing among religious persons, and especially among what I might call semireligious persons, a weak, morbid sentimentalism that cannot endure the idea of Divine justice, but shrinks before this stern attribute. It loves to dwell upon the tenderer and gentler attributes of Deity. It delights to think of the love, the goodness, the grace, the mercy, and the pity of God; but justice, strict and stern, this attribute is too vigorous, too healthy, too rude and robust, for their weak spirits. These sensitive, delicately organized, and refined souls shrink and droop in the presence of this too sturdy attribute.

This our age, my friends, is full of strange contradictions. But, perhaps the age is not peculiar in this respect: the same is probably true of all ages: indeed, they are but the outcome of the contradictions of the human heart. This age is the most practical of all ages; but it is also the most impractical of all ages. It is the most practical in all that concerns our material,

lower life: it is the most impractical in all that concerns our higher spiritual life. Thus it is that there is growing up side by side, often in the same individual, a gross materialism on the one hand, and a refined, unsubstantial sentimentalism on the other.

Now, in a true humanity our higher and our lower natures are closely and indissolubly connected with one another in a marriage relation, and both are infinitely benefited by the relation. Our higher nature, by its connection with the more vigorous lower nature, receives body and strength, while our lower nature by its connection with the higher is elevated and refined. This is the true type of a vigorous and healthy humanity. But the tendency of the age is to dissociate, to divorce the higher life from the lower; to separate our daily practical life from our inner religious and spiritual life, to separate our life in this world from our life hereafter: and the result is, our lower life, left to itself, becomes more material, more gross, more utilitarian, hardly elevated above mere animal life in its ideas and feelings; while, on the other hand, as if to make compensation, our higher life is sublimed away into an ethereal, visionary kind of sentimentalism for want of connection with the more vigorous lower life. It is this dissociation of the inner life, of the religious sentiments and emotions from the practical religious duties of life-it is this which constitutes what I call religious sentimentalism.

A similar spirit, it seems to me, may be traced in every department of human activity, giving rise everywhere to a false direction of activity. It is characterized everywhere by this divorce of the higher from the lower ife, and also by the turning of the activity of the mind and soul inward upon itself, instead of outward upon practical life. Thus, you will observe, it is a kind of selfism, but often a refined kind of selfism, all the more dangerous on account of its refinement. We find this, as already stated, in every realm of human activity, producing everywhere the same unhealthy inversion of the ends of life. We find it in the realm of thought, giving rise to false direction to intellectual activity. We find it in the realm of industry, giving rise to a false direction to industrial activity. We find it in the realm of art, giving rise to a false art. We find it in the realm of religion, giving rise to religious sentimentalism. The effect is everywhere the same, it destroys healthy activity. Let us, then, trace it in each of these different realms.

The first realm in which we shall trace this false direction of activity is the realm of thought. It is that metaphysical, speculative spirit which we described in our last lecture: speculation for the sake of speculation; speculation for the joy and excitement of intellectual activity; truth-seeking for the sake of the exercise, not for the attainment of truth; truth-seeking as a gymnastic training to produce strength, beauty, agility, and dexterity; and this strength and agility not to be used to attain any useful result, but only for intellectual display; for display of gymnastic feats, for exhibition of skill in dialectic contests, of skill in intellectual gladiatorship. These intellectual gymnasts pride themselves in the art of warding skillfully and skillfully planting a blow; the art of skillfully wrestling, and throwing an adversary. They are fond of debate

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for the sake of debate; of dispute, for the intellectual activity which comes of dispute, and the glory of victory.

"They will distinguish and divide

A hair 'twixt south and southwest side;
On either side they will dispute,
Confute, change hands, and still confute."

Truth-seeking to them is sport, a chase; rivalry is the motive, exercise and victory are the end.

Now, Science is entirely opposed to this false spirit. The earnest seeker after truth cannot thus lightly change sides for the sake of display and victory. Science seeks truth, not victory. Truth is the aliment on which she lives; she is willing, if necessary, to creep painfully from point to point, gathering crumb after crumb, and glad to get even these. These agile metaphysical spirits, therefore, despise the slow, steady, creeping advance of Science. Gathering crumbs is far below the soaring ambition of these nimble-skipping spirits. They speak of Science contemptuously as bread-andbutter Science. Meanwhile Science pursues its steady course, gathering crumbs here and there, little by little, careless either of exercise or victory, seeking only truth: knowing that growth, and exercise, and the best culture, and final victory, come only of truth-getting.

This false spirit of truth-seeking has invaded to some extent even the domain of Science itself. It does not find congenial soil there, however; it exists only in those who have not been thoroughly trained in scientific methods, nor imbued with the true inductive spirit. In science it is that wild and vague speculative spirit which leaps to conclusions without

sufficient basis of observation or experiments. Now, the true spirit of Science is altogether opposed to this. It clips the wings of speculation and of imagination, and makes these subordinate to cautious induction. Imagination is, indeed, necessary in science, as in every department of mental activity; but its wings must be clipped—it must be held subordinate to reason. We are but fledglings here, we are but nestlings crying for food; we are not able yet to soar; it is better not to attempt it, lest we fall and break our limbs.

You will observe, then, in comparing the false with the true spirit of truth-seeking, that the false terminates on self and the joy of its own intellectual activity; but it gathers no store, has nothing to distribute, and therefore confers no blessing on others. On the other hand, the true spirit, the spirit of science, terminates outward: first, as abstract science, it terminates outward and upward in seeking and gathering truth; and then, having gotten it, as practical science it terminates outward and downward, in distributing it and conferring blessing upon whatever it touches.

The next realm in which we will trace a similar false spirit is the realm of *industry*. There is a true and a false spirit of activity here also. The true spirit is that of enterprise and legitimate industry; the false spirit is that of speculation. The very name which we apply to it, *speculation*, allies it to the false speculative spirit in the realm of thought. True work in this as well as in the previous case consists in slow accumulation, persevering crumb-gathering and storing, and liberal crumb-distributing, thus blessing all it

comes in contact with. The false spirit in this, as well as the last, eagerly grasps after the whole at once, is full of restless excitement and activity, but, so far from conferring any blessing on others, it only blights and paralyzes the true, healthy spirit of industry. The true tightens, the false loosens, all the bonds of society. Speculation lives upon ignorance and dies in the presence of knowledge: Science is the enemy of speculation, but the fast friend of legitimate enterprise and industry.

Let us next trace the same false spirit of activity in the realm of fine art, the realm of imagination and emotion. Here it is far more widely spread and far more destructive in its effects.

Emotion, imagination: what is the true function of these? In every healthy nature these find their natural termination in active life. They are the natural stimuli to right conduct and noble action. Love naturally terminates in kind and helpful acts. Righteous indignation for social wrongs naturally terminates in attempts to redress. Pity in the healthy mind naturally and inevitably seeks its termination in the relief of suffering humanity. The very object of a healthy art, therefore, is, by means of the kindled imagination and the excited emotions which it produces, to stimulate the will to noble acts. It holds up the ideal of manly dignity and of feminine purity and beauty, in order that we may strive to bring our lives in accordance with these ideals. But in these latter times nearly all art has prostituted itself to feed the morbid sentimentalism of the age. The tendency is to produce excitement for the sake of excitement, emotion for the sake of the

delirious intoxication of emotion. True art ought to and does invigorate and strengthen and purify our natures, and prepare us for every duty of ordinary life; but this false art only weakens and enervates and unfits for active life.

We see abundant illustrations of this false art in the sensational novels and dramas of the period. These sensational writers are, in fact, but manufacturers of intoxicating materials, and those who indulge in the use of these materials, for the sake of mental intoxication, finally lose all their mental health and stamina. They live in an unreal world of delicious hasheesh dreams or delirous alcoholic excitement. tivity is in this ideal world. They spend their lives building unsubstantial castles in the air, when they should be building substantial castles on the solid ground. Persons of this kind will actually burn with indignation at unreal wrongs, and never think of redressing the real wrongs all about them. They will melt in maudlin tears over imaginary sufferings, and would not lift a finger to relieve the real sufferings at their door. They are recalled with pain and reluctance from the delicious ideal world of dreams in which they revel, to this dull, gross, material, actual world. suffering they weep over, but real suffering, associated as it often is with filth and rags, and perhaps with vice, bah! they shrink from it; their over-refined natures are affected not with pity, but only with disgust. They have been so long accustomed to weak self-indulgence, that they cannot bear the sympathetic suffering which they must feel in the presence of real suffering.

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In some persons of this morbid nature, even love,

that strong, noble, passionate emotion—even love, instead of going outward seeking its object, turns inward upon itself; instead of strengthening, as it ought, every part of our nature, mind, heart, and body, so that the whole man is all aglow with a stronger and nobler manhood, sinks into weak love-sickness, moping, growing melancholy, losing its appetite, and falling away, and finally ends in loving, not the object, but the delicious sensation of love. Even the stormy passion of grief, grief for the loss of dearest ones, is similarly transformed into grief-sickness. A strong, healthy soul will strive with its utmost power to bring even this emotion into subordination to reason, and for this purpose will throw itself with greater energy into active life; but these morbid and sentimental souls turn inward and feed upon themselves and nurse their own emotions until love for the lost one is transformed into love for the grief itself.

Last of all is the misdirection of activity in the realm of religion. Here the sad effects are so great that I have no heart to describe it at length. Here, as elsewhere, it consists essentially of a turning inward of the sentiments and emotions, feeding upon and delighting in themselves, instead of going outward to terminate upon the practical duties of life. Alas! how often do we find this introversion of activity! How often do we find persons who experience delightful religious emotions, who express beautiful religious sentiments, but neglect religious duties! Such persons love to talk of Christian virtues and the beauty of Christian character; they admire it much as they do a picture; they love to contemplate Christ healing the sick, feeding the

multitude, and blessing little children, but not with a whip of small cords purifying the temple, and still less as the inexorable final Judge. Talk to them of Christian sentiments and Christian virtues, they are eloquent; talk to them of Christian duties and Christian responsibilities, they are cool; talk to them of self-sacrifice, of human depravity, or of inevitable punishment for infraction of moral law, and they shrink away. It is this state of mind, this religious sentimentalism, that cannot endure the idea of inexorable justice as a Divine attribute.

Now, in its whole spirit, and with its whole power, science opposes every form of subjectiveness and sentimentality—this false direction of activity in every realm. All these err by introversion of activity, by turning inward and terminating on self; science turns ever outward and upward for truth, and, having obtained it, again turns outward and downward in useful embodiment. Again, all these err in terminating in culture; science seeks truth rather than culture, knowing that both growth and culture come with truth. Again, all these err in dissociating the higher from the lower nature, and thus starve our spiritual nature by want of vital connection with our more vigorous lower nature; science binds all parts of our individual nature and all parts and classes of society, both higher and lower, together in indissoluble practical union. I have already illustrated fully the antagonism of science to other forms of this false spirit; it only remains to show how it antagonizes religious sentimentalism, and vindicates and illustrates the inexorable justice of Deity.

You will remember, then, that the religious senti-

mentalism of the age abhors the idea of inviolable Divine law and inexorable Divine justice: Science, on the other hand, sees everywhere and knows only the reign of universal, invariable, inexorable law, inviolable without punishment. In Nature, every act and every event produces inevitably its legitimate result. In Nature, opposition to law is simple waste of energy, violation of law is inevitable injury. Law, in Nature, vindicates itself and punishes inevitably by its own operation. Human law is external; it is something imposed and not necessary: it may be different from what it is, it is different in different places, and at different times. But the Divine law is not external, superimposed, added to Nature and to us: it is around us and within us, embracing us and penetrating us: it is the same everywhere and at all times. In human law, punishment also is external and superimposed; it is not necessary, and may often be avoided. The Divine law, on the contrary, is not only universal, but, under it and in it and by it we live, and move, and have our being; to avoid it, therefore, is impossible; to violate it is to bring punishment on the offender by the operation of the law itself.

We sometimes personify human law; we speak of the dignity of the law, of the law doing this and the law doing that, but we all know that it is only by a metaphor that we thus speak. But the Divine law, especially in physical Nature, being everywhere present, invariable in its operation and inevitably vindicating its own dignity and bringing its own punishment, it is almost impossible for the human mind to avoid believing in its personality or at least in its efficient agency. Nevertheless, law, whether human or Divine, is not and cannot be an efficient agent—it is only, and can be only, the mode of operation of will guided by intelligence. Only in the case of Deity, the intelligence being perfect, and the will unchangeable, the law is invariable. Thus, you perceive that the universality of natural law is not only the symbol of, but it is, the omnipresent, Divine energy; the inviolability of natural law is not only the symbol of, but it is, the inexorable Divine justice.

We have seen, then, that the laws of Nature everywhere carry their own vindication and inflict punishment by their own operation; but the severity of this punishment is in proportion to the dignity of the law violated. Thus, in the realm of external Nature, the violation of physical laws results in failure, in waste of energy, in disappointment, perhaps in financial ruin; in the realm of organic Nature, in our own bodies, violation of physiological laws brings severer punishment, brings pain and disease, and premature death. So, also, in the higher realm of moral Nature, the violation of moral law, inevitably and by its own operation, brings far sorer punishment, brings anguish, and misery, and spiritual disease, and spiritual death. As in the violation of physiological laws and in the sickness which follows, we may by stimulants put off the evil day, we may by opiate drugs benumb the senses into forgetfulness and sleep, but cannot avert the final event; even so in the violation of moral law and in the moral sickness which follows, we may stupefy the soul and drown it in deep opiate sleep of sensuousness and unbelief; but this will not, cannot avert the final result.

LECTURE IX.

LOVE.

My Christian Friends: The subject of my evening's lecture is the Divine Love—a subject of such sacredness and tender interest for every one of us, that I know not how I shall treat it worthily. of God, the goodness of God, the beneficence, the compassion, the mercy, the grace of God! How the heart throbs, how the tenderest associations of our past life come rushing in upon the soul, at the bare mention of these words! These are often treated separately, but they are evidently but different modes of the same attribute. Warming the Divine heart in sympathy, we call it love; going outward in kind acts, we call it goodness or beneficence. the heart painfully at the sight of suffering, we call it pity or compassion; going outward, again, in help and relief, we call it mercy. But so is it with all the Divine attributes: they are all one, they all proceed from the same essential nature; trace them upward, they converge and unite, but their point of union is lost in the insufferable light of the absolute. It is so with all; but these are so obviously one that we cannot treat them separately—they unite and become one even within the range of human vision.

The Divine love is clearly and abundantly revealed in Nature, but only in the form of general benevolence and general beneficence. Nature, including man, is but one scheme. Whether we regard external Nature as made in accordance with the wants of man, or whether we regard man as made in accordance with the laws of Nature; or whether we regard man as having sprung by a process of evolution out of Nature; in either case the result would be the same, viz., the adaptation of external Nature to the nature and wants of man, and therefore, the general beneficence of the laws of Nature in relation to man. The daily cycle of Nature, morning, noon, evening, and night, to be again followed by morning in perpetual round: is not this beneficent to man in refreshing his strength? The annual cycle of Nature: spring with its buds and blossoms, summer with its leafy boughs, autumn with its waving cornnields, its clustering vines, and its scattered leaves, and winter with its snowy shroud and death-sleep, to be again followed by the reawakening of spring in eternal round: is not this beneficent to us, bringing us seed-time and harvest? The circulation of air and water-vapors rising from the ocean, condensing in gathering clouds and falling as rain upon our mountains, and back again flowing as rivers to their ocean-home, in eternal round: is not this also beneficent to us, watering our meadows, fertilizing our plains, and turning our mills?

Even things in Nature which seem to us evil, when deeply considered, are really beneficent in their general effects. *Earthquakes* and *volcanoes*, which strike us

with so much terror, are but occasional accidents necessary in the general operation of those grand laws by which continents and sea-bottoms and mountain-chains are formed—the laws by means of which this earth was gradually prepared for the habitation of organisms. and finally prepared for the habitation of man. we consider evil; but painful sensations are only watchful vedettes upon the outposts of our organism to warn us of approaching danger. Without these, the citadel of our life would be quickly surprised and taken. Even death itself, which we look upon as the sum of evils, is really beneficent in its general effect. For, observe, the quantity of matter to be appropriated and embodied in the organic kingdom is very limited. It would be quickly exhausted were it not constantly returned to the atmosphere, whence it came, by death. One generation takes it, embodies it a brief time, and returns it by death. Another generation takes the same, embodies, and again returns it. Thus, the same matter has been embodied and disembodied thousands, yea, millions of times, in the geological history of the earth. The law of generation obviously necessitates the law There can be no doubt, therefore, that the sum of animal happiness, yea, of human happiness, on this earth has been infinitely increased by the constant change of generations, and, therefore, by the law of death.

We see, therefore, that Nature reveals clearly the general benevolence and beneficence of Deity, and all the more clearly in proportion as we study her laws more deeply. But the human heart yearns for something more than general beneficence and general benevolence. The human heart yearns for special, per-

sonal love which shall answer to his own yearning, personal affections—fatherly love on the part of Deity answering to the filial yearnings of his own heart. But Nature, when questioned on this point, is silent, Alas! thus is it always with Nature; the very questions which concern us most deeply-viz., our personal and moral relations to Deity-she either refuses to answer, or else answers only imperfectly. It may be that hereafter, when we understand her better, her revelations may be clearer on this point, but at present her answers are imperfect. Nature reveals clearly the intellectual character of Deity, but less clearly his moral nature. She reveals clearly personal intelligence, but less clearly moral personality. She reveals very clearly the sovereignty, but less clearly the fatherhood She is a perfect revelation to our intellects, but imperfect to our hearts. But man has also a moral nature, as well as an intellectual nature, in the image As there is a Divine intelligence answering to his intelligence, there must be also a Divine moral nature, and especially a Divine love, answering to his love. There must be a clearer revelation of these than we find in physical Nature, for such a revelation is man's sorest need.

Yes; there is such a revelation in our own moral nature, in our own hearts, for it also is in the image of God. Our moral nature is, to some extent, a revelation of the moral nature of Deity—our own love is a revelation of the Divine love. But, alas! our hearts are so imperfect, the image of Deity is so obscure, and our methods of interpretation are yet so uncertain and deceptive, that still another external revelation is ne-

cessary in order to interpret this one aright; another by means of which the image implanted in the human heart may be brightened until it becomes a reliable revelation. Such a revelation we find in Scripture. In the Scriptures, therefore, and especially in the person of Christ, and nowhere else, we find a revelation of Divine love in all its infinite fulness and all its infinite tenderness—a revelation of the fatherhood of God, which completely satisfies all the yearnings of the human heart, and all the demands of an enlightened human reason.

There are some attributes of Deity which are called essential, because of their closer connection with his essential nature—absolute being. But, in one sense, all his attributes are equally essential, as all are equally necessary to his infinite perfectness, and all equally flow from his essential nature. Nevertheless, this is especially true of two, viz., unconditioned being and love. These two can hardly be called attributes, they rather constitute his essential nature. From the absolute point of view, simply in himself considered, his essential nature is unconditioned being; but, from the relative point of view, considered in relation to other moral beings, his essential nature is love. Love is the essence of moral relations; it is, therefore, the bond of connection between God and man. Therefore, the dearest and also the truest conception of Him in his relation to us is that of Father.

This twofold essential nature of Deity—viz., the absolute and the good—is embodied in the very names of Deity; the one in that awful Hebrew name Jehovah, the other in that more familiar and dearer Eng-

lish name God—the Good one. He is revealed in the Old Testament as Absolute being, "I am that am;" but, in the New Testament, his essential nature is revealed as love. Other attributes are spoken of as attributes qualifying his essential nature, but this one is spoken of as his essential nature itself. God is just, true, wise, mighty; but God is not only loving, "God is love."

But some religious sentimentalist will perhaps ask, "Can it be that such a one, who is not only loving, but whose essential nature in relation to us is love, who is not only merciful, but whose essential nature is mercy, can such a one punish severely weak, erring man? Is not this attribute inconsistent with inexorable justice?" My Christian friends, the Divine attributes are all one; they cannot be separated. Love cannot exist apart from justice. Is it not so even with our human attributes? Is it possible that a true human love should not be just also? Do we not at once recognize that a love which is not also just is not a true love, and is not, therefore, in the image of the Divine love? it is self-love mixed with love; it is weak self-indulgence.

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We have thus far spoken of love as a Divine attribute only. We come now to speak of it as a human attribute; we come now to speak of it in relation to man and in relation to human life.

In the previous lectures, you will remember, we have shown that all wisdom, justice, power, and truth, is Divine, and that there is none other besides the Divine, and whatever is in man is accordant with the Divine. So must it be also with love. All real and true love in man must be that which is accordant with the Divine love. As truth is the answering of the human thought to the Divine thought, and then the outgoing of this to terminate upon our fellow-men; as all that is true and good in our nature and in our activity is the receiving of the Divine by revelation, and then the shedding of it abroad by a secondary revelation: even so love in man is but the answering of the human heart to the Divine love, and then the outgoing of this to terminate on our fellow-men.

If, then, God's essential nature in relation to man be love, man's essential nature in relation to God, and in relation to his fellow-man, is also love. If God is love, then the Godlike in man is also love. indeed the deepest of truths. In the widest and deepest sense love is the essence of all moral relations, the only true bond of connection between moral beings. As distinct and widely separated bodies in the physical universe are controlled only by the universal force of physical attraction which we call gravitation, even so in the moral world, separate, independent, moral beings are bound together, each in his several sphere, only by the force of love. If gravity is the force which keeps the heavenly bodies in beautiful order and harmonious motion, even so the whole harmony of the moral world is determined entirely by the law of love. This idea is perfectly expressed in that profound saying of St. Paul, "Love is the fulfilling of the law." Yes, of the whole law, the law of God, and the law of man.

There is good as well as evil in human nature; not in a select few, as some would have us think, but in every human heart, for the image of God is in all. This image may be defaced, and blurred, and blotted,

almost invisible; but it is never wholly obliterated, and another image and superscription, viz., the devil's, stamped in its place, as some seem to think. it is gradually growing brighter, in some it is becoming darker and ever darker: but in every man, by virtue of his humanity, that image is still there. is no human face, however deformed by vice, there is no human soul, however debased by sin, but there is something there worthy of our love, yea, worthy of our reverence, viz., the Divine image. If we cannot see it, it is our fault; God sees it and compassionates its defaced condition. This fact is the basis and condition of religion and virtue; it is the very seal and stamp of our humanity; without it, we were no longer men, but fiends incarnate.

There is, then, much good in man; yes, much good, like his, because it is his. Human justice, enacting and enforcing laws, and punishing iniquity, is good. Carry this upward from the finite into the infinite, and it becomes the self-vindicating justice of God. Human wisdom is good: carry it upward from the finite to the infinite, and it becomes the Divine wisdom. Power in man is good, when exercised for right purposes: carry this upward in thought until it becomes infinite, and it is the omnipotence of God. Honor, truth, purity, are not these good? are not these noble in man, and lovely in woman? carry these upward, from the finite into the infinite, and they become the honor, truth, and holi-Human love, conjugal love, maternal love, filial love, are not these good? are not these the source of nearly all our earthly joys? combine these together, purify them, and then carry them upward to

the infinite, and they become the all-embracing love of God. All good in us, all that we rightly admire, or honor, or reverence, or love, in ourselves or our fellowmen, are but faint reflected images of that which is infinite and perfect in Deity. Is it possible that any human heart can forbear to love and worship such a being? Will any one say He is too far above us, we cannot reach and take hold of Him? Then see Him descend and veil himself in human flesh: see all these infinite perfections, embodied in our fellow, our brother, our Master.

There is, then, much good of many kinds in man. But the essential good in man, that which underlies every other good quality and transmutes it into good, is love. This fact is recognized by popular instinct, and embodied in the word goodness, which is active love. The essential nature of Deity is twofold, absolute and relative, unconditioned being and love. But man is finite and conditioned, and only exists in relations; therefore, the essential nature of man is only one, love.

Since love, then, is essential good, it follows that selfism, using the word in its widest sense, as the termination of activity inward upon self, instead of outward upon others, is essential evil. Every form of vice and of evil comes of selfism. It may take the more refined forms of culture for culture's sake, of mental activity for the joy of mental activity, or of morbid sentimentalism, feeding on the excitement of its own emotions; it may take the grosser form of sensuality and the indulgence of the lower appetites and passions; it may take the harder and still more odious

form of disregard of the feelings and interests of others, and the cruel use of others for our own purposes; it may take still another form which some persons seem to think even noble and good, viz., arrogant self-isolation, pride, self-asserting independence; but in every form it is evil, and evil only. Love is the law of our higher moral nature; selfism is the law of our lower animal nature, and these are the two laws warring in our members of which St. Paul speaks so feelingly. The law of selfism is indeed natural, and therefore right, when subordinate to the higher law. It becomes true selfism, and therefore evil, only when it is the predominant law of our being. The law of our being is our lower animal nature, subordinate to our higher spiritual nature; the law of selfism subordinate to the law of love.

Love, as we have already said, is the fulfilling of the law of God. It is also the fulfilling of the law of our being. This, it seems to me, is the deepest truth in all philosophy. But it was not St. Paul who first enunciated it. It first fell from the lips of the Divine Master, although not in the form of a philosophic formula, for that was not his mode of teaching. You will remember that, on one occasion, when a doctor of the law asked Him, "Which is the greatest commandment?" He answered, "Thou shalt love the Lord thy God with all thy heart, and all thy mind, and all thy This is the first and great commandment, and the second is like unto it: thou shalt love thy neighbor as thyself. On these two commandments hang all the law and the prophets." The sum of the whole moral law is love to God and love to man; but

these two are but different forms of one single principle, viz., love. In fact, it is not only the same principle, but it may be said to be applied to the same thing: for it is love to God and love to Godlikeness in man; it is love of the Divine original, and love of the reflected image of the Divine, however feeble, and wherever found.

This, beyond doubt, is the grandest generalization in all philosophy. Let me illustrate by another similar generalization in the department of science.

Nature reveals herself to us in sensuous phenomena, infinitely numerous and infinitely varied. These phenomena are not the subject of science; they are only the object of sense. They affect animals precisely as they do us. The first step in human reason, and therefore in science, is the grouping of these phenomena into laws. The next step is to rise higher, and group these laws under higher, fewer, and more general laws. We then, by a higher generalization, group these under still higher, fewer, and more general principles or forces of Nature. These are electricity, magnetism, heat, light, gravity, chemical affinity, vital force, and the like. For a long time the generalizing faculty of man paused just here. These forces seemed to be separate, independent principles or agents, controlling the phenomena of the universe; and all phenomena were grouped under these, producing the different departments of science. But it is the glory of modern science to have shown that these, again, may be transmuted into each other; that they are not independent principles, but are all only different forms of one universal, omnipresent energy, which is nothing less than the omnipresent energy of Deity himself. On a previous occasion I spoke of the fact that the realm or domain of human thought and human science is all that lies between the phenomenon, the *object of sense*, and the First Cause, the *object of faith*. Now, here you will observe that science has carried us up higher and higher until it brings us within sight of the splendors of "the great white throne," and of Him who sits thereon.

Now, this last step in science has been justly regarded as the greatest triumph of human thought; but there is another generalization of which we hear little talk, a generalization far grander because in a higher, viz., a moral field; a generalization not reached by human thought, but freely given by Divine revelation; a generalization not expressed in a scientific formula, but enunciated in simple language by Divine lips. Let us trace the process and the stages here also.

Human duties or moral acts, like natural phenomena, are infinitely numerous and infinitely varied, ever changing with changing conditions. These are in the domain of the sensuous and phenomenal; they are not the subject but only the materials of philosophy. The first step in reason and philosophy, the first generalization, is grouping these under laws-laws of church, laws of state, laws or customs of society. next step is, again, grouping these under, or tracing these up to, ten grand moral principles. the ten commandments, from which, we all admit, flow all lower laws and duties. This was the generalization of the old dispensation, the Mosaic generalization, the grandeur of which it is difficult for us now to appreciate. For a long time the process of generalization again paused just here, until the coming of the Divine Master. Then these, again, by a higher generalization, are traced up to two grand principles, love to God and love to man; and these are but two forms of one, viz., love, and God is love. And thus we are carried again up to God himself, the last term of human thought.

Observe again: In external Nature all laws and all forces are but modes of the same omnipresent Divine energy; the form or mode varying according to the varying conditions under which the one energy operates. So, also, in moral Nature, all moral principles, all laws of church, of state, or society, in so far as they are true principles and laws, are but different modes of the one omnipresent Divine moral energy, love; the forms and modes varying according to the conditions under which the one energy operates. Such being the absolute unity of the physical forces of Nature, do you not perceive that it is impossible to destroy one force without destroying all? for all are different forms of the same; it is impossible to abrogate one law without destroying the whole system of laws. To break one law, is to break all; to keep one, is to keep all. also is it in the moral world, and for the same reason: "He who offends in one point is guilty of the whole." To break one law, is to break all; to keep one, is to keep all, because all are one. Keeping or breaking any law is fulfilling or violating the one universal law of love.

I recollect once hearing a pure-minded young lady say that she thought there was at least one commandment which she was unconscious of ever having broken. In some surprise I asked which it was. She answered, The third: "'Thou shalt not take the name of the Lord thy God in vain.'" I believe many persons think they never break that law. On the contrary, we all fail to keep this law. To keep this law is to keep all the Divine laws. In its deep spiritual meaning, what is the third commandment? It is to rise to a just conception of Deity, and then to give all the honor and reverence due to that conception. Any thing short of this fails to fulfill the law of love and reverence embodied in the third commandment.

Finally, let me draw your attention to the contrary process of Divine and human activity—Divine activity in revealing himself to man; and human activity in upreaching and apprehending Deity. Deity flows downward into Nature first as the one omnipresent energy; but this is far above the reach of man. He then comes lower and nearer the apprehension of man by separating into the great principles or forces of Nature; then, again, these reveal themselves, and He through them reveals himself, and comes nearer the apprehension of man, in the laws which flow from these forces, and so on until the last ramifications as phenomena reach and fix themselves in the sensuous nature of man.

Man, on the contrary, commencing with these extreme ramifications, by a reverse process passes upward in thought, from phenomena to *laws*, from laws to *forces*, from forces to the one omnipresent energy, and so back again to God himself.

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So also is it in the moral world. Deity flows downward into the heart of man, and reveals himself there as the universal energy, love. But, alas! how little

understood! It must come far lower and become far more manifold and concrete, before man can take hold and climb up. It divides, then, into two great principles—love to God and love to man—again into ten great moral principles, and again into laws religious, political, and social, and so downward into the daily duties of life which flow from these laws. This is the natural law of revelation whether in the physical or the moral world—whether in external Nature or in the heart of man. Scriptural revelation is rather a Divine help to the human process. This human process is similar to what I have already described. Man, in thought, passes from daily duties to laws, then traces these laws to fewer moral principles, and these upward into the one general principle of love, and thus back again to God.

The same two processes may be again otherwise illustrated: The essential nature of Deity—the absolute, the unconditioned—in the first step downward in the flow of revelation toward man, reveals itself in what we call the *essential* attributes. Downward again it flows, becoming more human, and nearer to the comprehension of man, and reveals itself in the *moral* attributes. Still downward it flows manward, and reveals itself in the individual, providential acts of Deity. Human thought, on the other hand, by a reverse process, ascends from Divine acts to moral attributes, from these to essential attributes, from these again to the absolute, the unconditioned.

Thus, you perceive that the Divine activity in selfrevelation is *descensive*, down-reaching toward man; while human activity, in apprehending, is up-reaching and ascensive. Again, the law of Divine self-revealing is not only descensive, but proceeds by successive ramification, successive differentiation, until the last ramifications take firm hold of and are deeply embedded in the sensuous nature of man; while human activity, in apprehending Deity, takes hold of these last ramifications, and ascends by an inverse process of successive integration and unification, until it reaches the conception and the worship of the absolute unity of Deity.

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LECTURE X.

HOLINESS.

My Christian Friends: I approach, not only with reluctance, but even with fear, the subject of my evening's lecture, the Divine Holiness. There is no attribute of the Divine nature which should so affect us with deep humility-none before which our pride and self-sufficiency should so fall prostrate with face in the dust-none which seems to show between Him and us so impassable a gulf, as this of holiness. There is none, therefore, which seems to us so awful, but which is at the same time so glorious as this. There is none which is so frequently mentioned in the Scriptures, and in such sublime and glowing language, and which is so closely connected there with the Divine glory. In the grand language of Moses: "Who is like unto thee, O Lord? glorious in holiness, fearful in praises, doing wonders." Isaiah, in still more sublime and glowing language, represents the seraphim in his presence as covering their faces and crying one to another: "Holy, holy, holy, is the Lord of hosts: the whole earth is full of his glory."

Shall I call this an attribute, then? Is it not rather the glorious combination of all his attributes into one perfect whole? As all his attributes proceed from the absolute, so all again converge and meet in holiness. As from the insufferable white light of the Absolute they all seem to diverge and separate into prismatic hues, so they all seem again to converge and meet and combine in the dazzling white radiance of his holiness. This, therefore, is rather the intense whiteness, purity, clearness, the infinite lustre and splendor of his perfect nature-like a gem without flaw, without stain, and without color. All of his attributes are glorious, but in this we have a combination of all into a still more glorious whole. It is for this reason that it is so frequently in Scripture associated with the Divine beauty. The poetic nature of the Psalmist is exalted to ecstasy in contemplation of the "beauty of holiness," the "beauty of the Lord." Beauty is a combination of elements according to the laws of harmony; the more beautiful the parts or elements, and the more perfect the harmonious combination, the higher the beauty. How high and glorious, therefore, must be the beauty of this attribute which is the perfect combination of all his infinite perfections!

You see, then, why this attribute is awful to us. In the ideal man all the faculties and powers, mental, moral, and bodily, work together in perfect harmony, making sweet music—the image of God is clear and pure in the human heart. But, alas! how far are we from this ideal! In the actual man the purity is stained, the beauty is defaced, the harmony is changed into jarring discord, "like sweet bells jangled out of tune." How it came so, we are not now inquiring. We all feel that it is so. Therefore is this attribute

awful to us. It is the awfulness of absolute purity in the presence of impurity; it is the awfulness of perfect beauty in the presence of deformity; it is the awfulness of honor in the presence of dishonor and shame; in one word, it is the awfulness of holiness in the presence of sinfulness. How, then, shall we approach Him before whom angels bow and archangels veil their faces — Him in whose sight the white radiance of heaven itself is stained with impurity?

Is this glorious attribute also revealed in physical, material Nature? Yes, even this is revealed there; but only as such an attribute can be revealed there—viz., by physical symbols. There is a deep correspondence between things spiritual and things physical, a correspondence necessarily flowing from the fact that the physical proceeds from, and therefore must be a revelation of, the Divine spiritual. Now, we have already seen that holiness is the harmonious combination of all the Divine attributes into one perfect, beautiful whole. Evidently, therefore, the symbol, or correspondence, or revelation, of this must be found in the beauty and the harmony of the physical universe, a beauty and a harmony determined by perfect law.

There is in all things physical and material an interior beauty inexpressible, ravishing; an interior beauty perceived only by the mind. It is the beauty of orderly arrangement—of perfect adjustment of every part to the whole, and of activity of the whole according to perfect law. This interior beauty is universal; but it sometimes also emerges to the surface as glorious exterior, sensuous beauty, and then only does it produce its fullest effect upon the mind. The *interior*

beauty it is the province of science to discover; the exterior beauty, which is but the manifestation of the interior to the senses, it is the province of art to embody.

Let me illustrate by some examples: We have several times spoken of the solar system with its wonderfully complex arrangement of parts, all moving in perfect harmony, each affected by each, and all controlled by the sun, the whole together constituting a harmony which affects the mind like deep divine music—a music, however, which is heard only by the attentive ear of Science. Now, observe, that here the law is the law of gravitation, and the result is the exquisite interior or intellectual beauty of activity, according to this law.

Take another illustration: Under the influence of chemical and physical laws, the ultimate molecules of matter in solution are marshalled in perfect order, and arranged in the most exquisite symmetry, until finally this beautiful, orderly arrangement, according to perfect law, emerges on the surface in crystalline splendor, the sensible sign of the interior order.

Take another illustration: In the animal body there are many organs, each having its diverse function, all cooperating together in the most perfect harmony to produce one result, which in this case is the life and health of the individual. Here, again, you observe, each part influences and is influenced by each, and all move together according to law, in this case the higher law of animal life, and the result is perfect interior harmony and order; but, here again, also, this interior order emerges on the surface as animal beauty or the still higher and more glorious form of human beauty.

So is it precisely in the moral and spiritual world. When the attributes, powers, and faculties of the mind and heart act together in perfect harmony, making sweet music, and all under one law, the law of love, the result is spiritual harmony, spiritual beauty, or holiness. Am I not right, then, in saying that the Divine holiness is everywhere revealed in external Nature?

But, is this Divine attribute revealed also in human nature? Alas! of all the Divine attributes this certainly is the most imperfectly revealed there, if indeed it exist there naturally at all. Man is made in the image of God, and therefore there is certainly much that is good in the human heart; yes, truth and love, and justice and wisdom are there, and these are all good in so far as they are like the Divine original; but the harmonious combination of these into spiritual beauty-alas! this it is which is wanting. The sensuous nature, the moral nature, and the intellectual nature of man, with their several powers, each good in its place, are in discord with one another. The features of the Divine image, imperfect though they be, are all there; but the due relation of these to one another, the Divine expression, the beauty, is wanting; every note of the gamut is there, and each note may even produce sweet sounds, but they do not combine into melody; the bells are each of them sweet, but they are "jangled out of tune." It is this discord among the faculties and powers of the heart and mind, and more particularly the subordination of the higher and spiritual to the lower and sensuous—it is this which we call sinfulness. Am I not right, then, in saying that this attribute is not found in the human heart, and is its great want. So, utter is its absence, or at least so very dim is its presence there, that even the symbols of holiness which we find in Nature are not readily recognized or interpreted as such by man. To the Scriptures, therefore, must we go for an adequate revelation of this attribute, and there indeed, and there only, do we find it clearly and fully revealed.

Now, let me draw your attention to a remarkable In other pretended revelations, we find Deity represented as powerful, and, to some extent, in an imperfect, human way, as just, as true, as wise, as good; but where do we find Him represented as holy? holy God is found nowhere except in Scripture. the reason is plain. Other attributes of Deity we find, at least in some imperfect way, in the human heart. Out of these elements found in his own heart man may construct an object of worship and call it God. cannot, however, do more than idealize and project outward what he finds within. But the beauty of holiness is not there, and therefore he cannot project it outward as an attribute of Deity. In the Scriptures alone do we find a holy God: therefore is He spoken of in the Old Testament as the Holy One of Israel, because a Holy One was not known in any other nation. Is not this, then, a powerful argument for the inspiration of these Scriptures?

Once revealed, however, even holiness may be appreciated by the human mind, and for this reason: The image of Deity in the human heart may be, and is indeed, defaced and its perfect beauty destroyed; but it is not so utterly eradicated but that its true beauty

may be dimly recognized when once it is pointed out and explained: the harmony may be gone, but nevertheless, deep in the innermost recesses of the heart there lurks a dim reminiscence of its lost beauty or a dim perception of its ideal beauty yet to be realized, take it either way you like. Holiness is like a forgotten strain of music, still lurking unknown and unrecognized in the memory: strike one chord, and the whole may be dimly brought back to the mind. This chord is struck by the Scriptures. The true nature of holiness, once understood by the intellect, and what a glory and a lustre it sheds upon the whole moral and physical world! what a glory is there then in the nature of Deity! what a nobleness and dignity in the true nature of man! What a splendor even in the physical universe, as the symbol and revelation of Deity! Holiness once appropriated and possessed as an attribute of our nature, and what words can adequately express the glory of the change? It is a new heart, a new life, a new spirit, a new birth.

If, then, holiness is the beauty and perfection of the Divine nature, surely it is also the beauty and perfection of human nature. Now, we have seen that the whole work of man on this earth is to restore or perfect the Divine image in the nature of man, in the reason of man as truth, in the heart of man as love. Now, it is the harmonious combination of all these Divine features that constitutes the beauty of the Divine image or holiness in man. Holiness, therefore, is the true end of human life and every other is false.

My friends, I have tried to show you the exceeding beauty of holiness. Shall I now turn the other side of this picture? Shall I show you in contrast the exceeding ugliness of its opposite, sinfulness? If holiness is perfect law and order, then is sinfulness lawlessness and anarchy; if holiness is perfect harmony, then sinfulness is perfect discord; if holiness is spiritual beauty, then sinfulness is spiritual deformity; if the one is purity, and lustre, and life, and health, then is the other foulness, and blackness, and spiritual death, and corruption. If this be indeed the true nature of sin, is it at all strange that the Deity is represented everywhere in Scripture as being affected in its presence only with infinite abhorrence, detestation, and loathing? Is it not natural? Is it not necessary? Is it not so with ourselves in a lower sphere? I think I can show that it is so with ourselves in the lower sphere of sense.

Our spiritual perceptions, and therefore our admiration of spiritual beauty and our abhorrence of spiritual deformity, are so feeble that we are compelled to illustrate these by means of physical symbols. What, then, is the symbol, the correspondence, in this lower sensuous sphere of sin? I have already said—and the Scriptures constantly use the same symbols—it is impurity, death, corruption. I wish to show that these are true symbols, and that the very abhorrence which we all feel for impurity and corruption is evidence of an instinctive recoil of our higher nature from unholiness.

I have mentioned above the two principal symbols of sin, viz., *impurity*, or filth, and *death*, or corruption. Now, *impurity*, in its simplest form, is nothing more than a heterogeneous mixture of discordant elements without law. Things in themselves good, and, under law, even beautiful, when in lawless strife with one

another, affect us only with disgust. For instance, the commonest example of filth is perhaps the mud of a populous town. What is it composed of? Sand and clay, and coal-dust and water, mashed and trampled together without order. Take each of these separately -coal-dust, or carbon, under the influence of pure laws produces the most exquisite and beautiful of gems, the Sand, or silica, by itself and under the influence of perfect law, also produces crystalline beauty of the highest order. Clay also crystallizes under law in a similar perfect manner; while water by itself, whether liquid or in the form of snow and ice, is the very symbol of purity and beauty. Yet these, each of them so beautiful and pure in itself and under law, in helpless strife, and anarchy, and confusion, affect us only with disgust. For we instinctively recognize it as the symbol of the spiritual confusion of our own Our faculties and powers, too, of soul, body, and mind, are each good in their place and under law, out in helpless strife and confusion they make spiritual impurity, uncleanness, sin.

But the strongest and the truest symbol of sin, the truest because the strongest (for it is impossible to find any symbol strong enough), is death and corruption—death of an organism and putrescence of organic matter. How we turn away from this with disgust and horror! But why? Let us analyze the feeling a little. Certain elements, carbon, hydrogen, oxygen, and nitrogen, under the influence of pure physical and chemical laws, may unite in perfect order, and this interior order may emerge on the surface in crystalline beauty, producing in us only delight. Again: the same ele-

ments, carbon, hydrogen, oxygen, nitrogen, under the direction of a higher law, the law of life—a higher law subordinating to itself and using for its own purposes the lower law of chemistry and physics-may combine again in far more complex order to form still higher interior beauty, emerging on the surface in still higher forms of sensuous beauty, the beauty of organic forms, and giving us still higher delight. But that these same elements, after they have been combined to form organic matter, after having been the habitation of life, after having been governed by the higher law of life and fashioned into higher forms of organic beauty; that they should then be dragged downward and given up to the lower law of chemistry and physics—that which was intended for the higher law, to be given up to the lower law—this is death, this is corruption, putrescence; this affects us only with extremest disgust.

So is it also in the moral and spiritual world. Animal life, under the simple and pure lower law of animal life, is beautiful, and affects us only with delight. Also the higher moral and spiritual life, subordinating and using for its own noble purposes the lower animal and sensuous life, so that all work together in harmony according to the higher spiritual and moral law—this is a higher beauty, it is spiritual beauty, it is holiness; this affects us with an infinitely higher delight. But, that what was intended for the higher law, and is capable of attaining the more glorious spiritual beauty—that this should be dragged down and given up to the lower law of sense, is not this a more dreadful death and a more horrible corruption and put rescence?

Now, this is the essence of sinfulness. Sin is liter-

ally what the Scriptures call it—spiritual death. as death is the giving up of what was organized for the higher law of life to the lower law of chemistry and physics, so sin is the giving up of what was made for the higher law of spirit to the lower law of sense. If we do not regard this with infinite abhorrence, it is because we so dimly feel the reality of our higher spiritual life. Indeed, from the Divine point of view, or even from the highest philosophic point of view, there is no other real death and corruption but this. All others are only so from our limited, sensuous point of view; all others are only symbols of this dreadful reality. All others, from the highest point of view, are beneficent, are in harmony with the grand whole, and work out the Divine ends. But this is discord, the only real discord in the universe. The universe was made for spiritual ends, to find its term in spiritual Death and corruption here are death and corruplife. tion indeed.

Now, if such as I have described be the nature of sin, and such, therefore, the Divine abhorrence of sin, then, how absolutely necessary must be holiness to us, if we seek his favor! "Without holiness it is impossible to please God." Without holiness it is impossible to see God; for, "blessed are the pure in heart, for they shall see God;" not see Him with bodily eyes, indeed, but become partakers of his nature; not see Him hereafter, at another time, in another world only, but now, here, in this world, and we hope more gloriously hereafter. "Sanctify your souls as a temple," says Madame de Staël, "and the angel of noble thoughts will not disdain to appear in it." Surely a noble sen-

timent, beautifully expressed. But how much more glorious are the promises of Scripture! Sanctify your hearts as a temple, and the Holy Spirit of God will not disdain to take up his abode there.

Man, as I have already said—and as I will still, in the course of these lectures, continue to sav, because it is the very significance of human life—man is made in the image of God. The image may have lost its beauty, but the features are still visible. Wisdom, and truth, and honor, and love, like unto God's, still remain. Whatever in man bear these names, but are not in the Divine image, are mere shams. All that is good and true in man is in the Divine image; all else is false, mere semblances. Now, the harmonious combination of all these features into beauty, into a beautiful object of contemplation, as a passive state of the spirit is holiness, or spiritual beauty, the same combination of all these, working actively and harmoniously together, is spiritual life, or holy living. It evidently follows, therefore, that human life is true and real only in proportion as it is an image of, and is in harmony with, the Divine life; all other life is only apparent, a mere semblance, of life which is no life. Union with Him is spiritual life; separation from Him is spiritual death, not hereafter only, but now. There is, then, an apparent life which is only death: it is the use of the higher powers and faculties of mind and heart for purely worldly and sensuous purposes, the subordination of the higher to the lower nature. This is a semblance of life, but not a true human life. There may be in the lower kingdoms of animals and vegetables also a semblance of life which is really death. The branch severed from

the trunk retains its greenness and its freshness for a little while, but its real life is gone, and it, therefore, quickly withers away. A limb severed from the animal body retains a little while its beautiful proportions, and may even show, under the influence of appropriate stimulants, some signs of a kind of life, but quickly falls into corruption. The human body itself, recently dead, may be galvanized into a horrible, ghastly semblance of life, but quickly falls into corruption. So, also, in the spiritual world, there is a semblance of life which is no life. The powers of the dead soul may be galvanized by unholy energy into a semblance of life—a sensuous, worldly life—but quickly stiffen into spiritual death which cannot be mistaken.

Finally, holiness is therefore the real and only end of life. It is the only real spiritual life, and therefore the only real happiness, the only true blessedness. There is a dim, instinctive perception of this by every human heart, and it is for this reason that all merely worldly objects are, and must forever be, unsatisfying; that a life terminating in worldly and sensuous ends must ever be restless and miserable. How sad is the history of the vain chase after happiness! In our early, enthusiastic youth we commence life with the determination to possess real happiness. In the object which we see yonder, we think we shall find it. We start with all our energy in the pursuit, but, when we grasp it, it turns to ashes in our hand. We conclude we have mistaken the object. Surely, yonder, we shall find happiness. We start again in pursuit, we grasp it; alas! it again turns to ashes in the hand. But our objects, we now think, have been too low, we must get

higher to find happiness. "On yonder eminence surely I shall find happiness." We run, we climb, we struggle onward and upward; and, when we have attained the eminence, we are again disappointed. yonder, a still higher eminence, shining bright and pure in the upper air. Surely that is the home of happiness. Again we start with unabated ardor, but, when we reach it, it is only to find our old pain and disappointment. Finally, when our youthful ardor has abated, and we arrive at the fullness of mature manhood, we check a little our eager pursuit, we take counsel with ourselves, and review our past life so full of disappointment, if possible to make for ourselves some rational philosophy of life which shall guide us. And what is the result? Alas! some find, in perfect indifference, the true rational philosophy-all our noble aspirations are a delusion. This is the philosophy of the worldly wise. Others of more ardent nature find true happiness and rational philosophy in eternal pursuit; it is not the object attained, they think, but the activity and exercise of the chase, which is the chief good of man. This is the error which we have already exposed in our eighth lecture—the error of the metaphysician and the sentimentalist. Still others come to the conclusion that blessedness is not of this world, but we shall find it hereafter in another world. Miserable delusion again! If it is ever gotten at all, it must be by means which are usable for that purpose here in this world.

Thus man, child of eternity, driven out from his native home, surrounded on every side by his heavenly heritage, the Divine holiness, which yet his trembling

hands refuse to grasp, wanders with fugitive and uncertain steps over this earthly waste; striving ever to build himself a permanent dwelling-place, but happily ever reminded, by the speedy downfall of each successive habitation, that he can never find any peace except in his Father's house.

Thus, my friends, you observe, the only real life and the only real blessedness is holiness. The real life is not only blessed, it is blessedness itself; while the apparent, worldly, sensuous life is not only unblessed, it is unblessedness itself.

LECTURE XI.

FREEDOM.

My Christian Friends: the subject of my lecture this evening is the "nature of true freedom."

Perhaps some of you may think that this subject has little connection with the general character of this course of lectures. On the contrary, it has the closest connection; in fact, it naturally and inevitably flows out of my last two lectures. You will remember that, in the first of those two, I tried to show that love in man is the fulfilling of the whole law, the law of God, and of our spiritual nature, that it not only fulfills, but is the law of our spiritual nature; while in the last I tried to show that love, when it accomplishes its perfect work, results in holiness. Now, in this lecture, I wish to show that love and holiness work together to produce true spiritual freedom. Love, holiness, and freedom, are closely connected. Holiness is spiritual beauty, freedom is spiritual life. Holiness is equilibrium, beauteous adjustment, harmonious relation; freedom is harmonious activity. Holiness is the condition of perfect humanity as an object of contemplation; freedom is the same perfect humanity in vigorous activity. To use the language of mechanics, the

philosophy of holiness is spiritual statics, the philosophy of freedom is spiritual dynamics. Thus, you will observe, holiness and freedom are not only closely related, they are, in fact, the same thing from different points of view. Holiness is the underlying condition, freedom, the active manifestation, while love is the motive force and the law determining both. Holiness is freedom in repose; freedom is holiness in action.

If, then, holiness is freedom, it obviously follows that unholiness or sin is spiritual bondage, it is slavery. It is in this way that holiness and sin are always regarded in the Scripture. The Divine Master says: "Ye shall know the truth, and the truth shall make you free." Again He says: "If the Son shall make you free, ye shall be free indeed." St. Paul says: "Ye shall be delivered from the bondage of corruption into the glorious liberty of the children of God;" and again: "Where the spirit of the Lord is, there is liberty."

Liberty! Freedom! Ah, my friends, how the blood warms and the heart throbs at the very sound of these words! We all feel, and, in proportion to the nobleness of our aspirations, do we deeply feel that this is indeed the goal of all generous human strivings. Yes, the goal of all our individual strivings is the individual or the interior freedom; the goal of all our social strivings, the strivings of humanity, is the social or the exterior freedom. This has been dimly seen by philosophers of all ages. According to Aristotle, the goal or end of humanity is virtue; according to Plato, it is spiritual beauty or harmony among the faculties. Fichte makes the goal of humanity, the life according

to reason; Hegel makes it freedom. They are all right. These expressions contain all the same truth, viewed from different points—they are all partial views of the same glorious truth. But in Scripture alone do we find the whole truth told. In Scripture alone we find the way and the law and the underlying condition fully revealed. The way is the path of duty, the motive force and the law is the law of love, and the underlying condition is holiness. From the Scripture point of view, therefore, he who conscientiously pursues the path of duty, and lives according to the law of love, and thereby attains holiness, he and he alone possesses true freedom; in other words, the sincere Christian is the only true freeman.

But, alas! how entirely different from this is the ordinary notion of freedom! How much crime, how much anarchy and confusion, how much war and strife, yea, how much oppression, and tyranny, and slavery, have been enacted in the sacred name of freedom! So entirely different is the usual conception of freedom from that given in Scripture, that even religious men seem to think that the freedom spoken of in the texts quoted above is something quite different from, and having no connection with, the freedom after which all generous natures strive. And the irreligious and worldly even regard the spirit of Christianity as antagonistic to the spirit of freedom. To them religion is bondage, and unbelief and lawlessness and Heavendefiance is freedom; to them lawless thinking is freethinking, and lawless acting is free activity. But the Holiness is the only true interior Scriptures are right. freedom; and the only true exterior freedom is that

which is based upon the interior and modeled according to the same law.

There is, then, evidently a true idea of freedom, and As there is a true direction a false idea of freedom. and a false direction of human activity; 1 as there is a true spiritual life, and a false or worldly life, which is no life, but in fact death; so, also, there is a true idea of freedom, and a false, worldly, sensuous idea of free-· dom, which is no freedom, but is in fact anarchy, and confusion, and slavery. And as the true in every one of these cases is based upon the law of love, so the false in every one is based upon the law of selfism. Let us, then, attempt to show the distinction between the true Scriptural idea and the false, worldly idea of freedom. We will speak first of that freedom which is, perhaps, best understood, and which is certainly most sought after, viz., the exterior or social freedom, or freedom in the relations of moral beings to one another.

Freedom may be defined as unrestrained activity. Yes, freedom is indeed unrestrained activity, but the converse is not necessarily true; it is not true that unrestrained activity, as usually understood, is freedom. Yet it is this converse proposition which contains the ordinary notion of freedom. To most persons, I think, freedom is synonymous with independence. It is the doing as one likes; it is the absence of all law, of all subjection, of all subordination to, or dependence upon, another. And, of course, since this is impossible for all, unless all are exactly alike, it involves the idea of absolute equality. Now, so far from this idea being true, there can be no doubt that perfect freedom is

¹ Lecture VIII., p. 182, et seq. · ² Lecture X., pp. 169, 170.

quite consistent with perfect subordination; and, on the other hand, self-assertion, assertion of independence, is often the necessary and legitimate cause of slavery and bondage.

Let me explain: Man exists and can exist only in relations. He exists and can exist only under law and under government—family government, political government, and Divine government. He is bounded. limited, and conditioned, on every side—conditioned by his finite faculties, conditioned by his material nature, conditioned by his relations to other moral It is evident, therefore, that independence is impossible for him. Freedom, therefore, if this be the goal of humanity, cannot consist in independence. must consist in the loving recognition of the limits and conditions which surround him on every side. If, then, the loving recognition of these is freedom, the angry chafing against them must be bondage and imprisonment. Therefore we may again define freedom, more definitely, as unrestrained activity within the bounds of just law and rightful authority.

I think that most intelligent persons will accept this as a proper definition of such freedom as is possible for man; but I think, also, that almost all persons look upon the exterior law as not only limiting the area, but decreasing the amount and destroying the completeness of liberty. Most persons, I think, regard society and government as restraining and diminishing the natural freedom. Such persons, it seems to me, have not the true idea of freedom. On the contrary, social organization and exterior law is a necessary condition of freedom; and under these conditions, too,

freedom may be perfect. For if the reason understands and approves, and the will accepts, and the heart moves in perfect accordance with the exterior law, then one law pervades the whole and the part, the community and the individual; and perfect, unrestrained activity, or freedom, is the result. We may, therefore, define freedom again still more definitely as the harmony between the interior and the exterior law. This, I believe, is a true philosophical definition of freedom. Now, this harmony of the interior with the exterior law cannot be reached except by love. Love is freedom; selfism is bondage.

Let me bring out more clearly the true idea of freedom by means of some illustrations taken from Nature. I will again take first the solar system. Here we have the central sun surrounded by planets of various sizes and powers, and these again similarly by satellites, all moving together in perfect concord. No independence here, surely; on the contrary, each influences each. No equality here, for some are primaries and some secondaries, and all controlled by the central sun. they all move together in perfect harmony, according to one law, the law of their being, which, in this case, is the law of gravity. The law of the whole, observe, is also the law of each part. Now, the perfect adjustment of parts, the perfect equilibrium, the beautiful order, this is the symbol of holiness; while the harmonious activity of the whole, according to one law, this is the symbol of freedom.

Again, take the case of the human body. Here we have many organs, each having its separate functions, all coöperating together to produce one result, which

is the life of the individual. Here, again, there is no independence, no equality, in the ordinary sense of that term; but each influencing and influenced by each, each sympathizing with each, each helping each, and all controlled by one, viz., the brain, but moving together in perfect harmony according to one law, the law of their being, in this case a higher law, the law of life, and producing a higher order of beauty, and a higher kind of activity, approaching more nearly to the holiness and freedom which they symbolize. in this case law is not an external restraint, it is a rule of free, spontaneous activity. The law of each part (interior law) is also the law of the whole (exterior The harmonious relation of parts—in other words, health—is the symbol of holiness, and healthy activity is the symbol of freedom.

So also is it in the higher sphere of social life—in the organization of moral beings into a social body, or body politic. In the body politic also we have many organs, or corporations, each performing its several functions, and, in the perfect condition of society, all working in entire harmony together to produce one common result—viz., the life and development of society. Here, again, no independence is possible, but each moves in its appropriate sphere, be it higher or lower, with mutual sympathy and mutual help, and in perfect harmony, according to a still higher law—the law of social being, the law of love—and producing still higher beauty (holiness), and still higher life (freedom).

Observe, however, an important difference in this case as compared with the previous ones. In all the

previous cases the harmony is preëstablished, predetermined; in this the harmony is self-determined by the free will. This is the very essence of moral freedom, of true spiritual freedom. The reason must approve the law, the will must freely accept the law, and the heart beat in unison with the law; so that law becomes no longer an external restraint, but a rule of free activity. Or, to express it differently, in all the illustrations taken from the material world, the law, the beautiful order, the harmonious activity, is not ours, it is God's—it is determined by the laws of Nature; but in the moral world, though the law be still God's, it is his in order to become ours, by our own free choice.

The perfect ideal of freedom, therefore, includes, first, the interior freedom - i. e., perfect harmony among all the faculties of the mind and the affections This, from the physiological point of of the heart. view, makes the healthy spirit, from the Scriptural point of view, the holy man, and therefore the free man. Second, the ideal of freedom includes also the exterior freedom—i. e., the perfect harmony between the interior and the exterior law, and of both with the law of God. So that the one law pervades and animates the whole, and law becomes no longer an external restraint, but only a rule of free activity, unwritten except in the heart. This, from the physiological point of view, is a living healthy society; from the Scriptural point of view, is a holy people, a free people.

Of course, this perfect ideal is unattainable in this world. The highest practical ideal, the highest ideal which we actually propose to ourselves in this world, is perfect obedience to just law, to law exterior, written,

restraining. In this ideal the law is approved by the reason, accepted by the will, and the more or less rebellious heart and the life, by the mere force of the will, is brought into accordance with the law. This is organization of society on the law of duty, not the law of love. But the law of duty is, in some sense, the law of force; not exterior force, it is true, but interior force, the force of our own will. Even this, therefore, is not perfect freedom.

If, then, obedience to just and wise law is freedom and social life and health, revolt or resistance to just law is bondage, or else, far worse, anarchy; is social disease, or else social death; in a word, although we may call it by another name, is slavery, or else utter confusion; slavery, however, not by subjection, not by subordination, not by dependence; but by resistance, by self-assertion, by assertion of independence—bondage by the operation of violated law. So, then, there is a slavery which comes of resistance and revolt.

Let me illustrate this fact, so necessary to the true conception of freedom. We will take for this purpose the case of family government, the most perfect government on the face of the earth, most perfect because simplest, and because more than any other its law is the law of love. In the perfect family government, where love reigns supreme, although authority on the part of the parent, and subordination on the part of the children, may be complete, yet is freedom absolutely perfect, for every thing moves in harmony, according to the law of love. In the well-conducted family government there is the most perfect freedom which our humanity ever reaches in this world. How, then,

is freedom destroyed in this government? Either by abuse of authority on the one hand, or by resistance to rightful authority on the other. Either of these instantly brings discord between the interior and the exterior law, and discord is slavery; either of these violates the law of love and obeys the law of selfism, and selfism is slavery.

Slavery, then, may come in two ways, either by the abuse of authority, or by resistance to just law and rightful authority. In the one case it is slavery through tyranny and unjust law, in the other it is slavery through self-assertion and the operation of just law violated; in the one case the exterior law is in fault, in the other the interior law is in fault.

But the usual idea of slavery includes only the former, viz., that by abuse of authority, whereas the bondage spoken of in Scripture is always the latter, viz., resistance to rightful authority, and hence the general misunderstanding of the nature of true Christian freedom. The reason of this limitation of the idea of freedom and slavery in the popular mind is sufficiently evident. From the beginning of history until now, slavery has come by abuse of authority. Society has suffered so long from abuse of power that all social evils are associated in our minds with the exercise of power, or authority of any kind. Thus it has come to pass that in the popular mind freedom is synonymous with resistance to authority, and slavery is synonymous with subjection, or obedience, to authority.

It is easy to show that it could not have been otherwise. Let me explain myself: The goal of humanity is perfect intellectual, moral, and physical

I have called this condition holiness. called it also interior freedom. But this glorious goal can only be reached through perfect social organization. But how shall we reach a perfect social organization except by perfect culture? It is the last term of human thought to understand, and of human art to achieve, a perfect social organization. You see, then, the dilemma in which the human race finds itself in this world. It must ever seek after its goal, viz., perfect culture, or spiritual freedom; it can only reach that goal by means of a perfect society, and yet that perfect society itself can only be reached through cult-Now, how is this dilemma solved? In the only way it could have been solved: by first adopting a provisional organization of any kind, it matters not what, as the necessary condition of culture, until at more leisure, and by culture thus attained, it can construct a more rational organization. Any organization, even the most oppressive, is better than anarchy, for anarchy is social death. Society is the necessary condition of even commencing culture and improvement; society was, therefore, first organized in the simplest and most obvious way—upon material distinctions, upon conquest and force, upon birth, upon wealth. unnatural social organization as the necessary preliminary condition of culture, there was a gradual cultivation of the human mind until it reached that point when social organization itself became the subject of thought. It now immediately became evident that the then existing social organizations were entirely unsuited to the condition of human culture—they were unnatural and, therefore, irrational and productive of

slavery. Then commenced the process of revolt, of resistance, of tearing down the fabric of society, in order to clear the ground and recommence the construction of a new social organization.

See, then, the difference in their very significance between the old and the new social organization, between that from which we have emerged and that toward which we all intensely yearn. The former is the condition and the agent of human culture, the latter is the expression of the perfected humanity; the former is artificial, the latter is natural and rational; the former is man's work, the latter is also man's work, but under the guidance of the Divine Spirit, for it is the outward form of the interior holiness and freedom; the former is a house to protect our nakedness from the weather, the latter is a glorious temple wherein to worship God. But in these latter days we have torn down the old fabric, we have cleared the ground and have even gathered some materials for the new; but, alas! how little do we yet understand of the scientific principles upon which a perfect free society must be constructed!

Let me again illustrate: The human race has been put upon this earth homeless and houseless. Its business here is to construct the glorious temple of liberty. But how can it, except by perfect culture, understand the principles of that glorious architecture? Culture requires time; in the mean time it cannot live without a house. In this dilemma it hastily constructs a building of some kind—any kind, to live in and as a means of culture, a school-house, not a temple. In this school-house it has lived and submitted to school-discipline, and received culture, until now it thinks it has reached

its majority. Its school-days are over, and in its exuberant joy it not only rushes out and commences tearing down the old school-house, but seems to forget that there is any temple yet to be constructed. Liberty with these liberated pupils is living in open air, without any house at all.

Thus it is in the present age. We have passed the period of pupilage, and attained the age of reason. We have torn down and are still tearing down the old society, with which is associated every form of restraint, of social evil and slavery; but how little we understand the new! We have torn down the old schoolhouse, associated only with restraining discipline; but how few understand, or appreciate, the glorious beauty of the coming temple! The present age is a transition between the old and the new; the spirit of the age is, therefore, destructive rather than constructive.

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The usual idea of freedom, therefore, as I have already said, is the right to do as one pleases; it is the independence of everybody of everybody else; and the idea of slavery is subjection to authority of any kind. The characteristic vice of the present age is this spirit of independence, of pride, of self-assertion. We would, every one of us, be as God, self-existing—unconditioned. We clamor for rights only, and forget our duties; we stand, every one of us, upon self-defense, and think nothing of mutual help.

Now, this spirit is precisely the opposite of the true Christian spirit, as well as the true philosophic spirit, and, I may add, to the true spirit of freedom. The Scripture everywhere insists upon duties rather than upon rights; it insists everywhere upon mutual help rather than upon self-defense. The true Christian spirit is a spirit of loving, helpful recognition of inferiority where inferiority exists, and a loving, reverent recognition of superiority where superiority exists. The usual idea of freedom, viz., its identification with independence, if pushed to to its logical conclusion, if carried out to its legitimate results, would destroy all moral relations and all forms of government, whether family, political, or Divine, and end in the simple anarchy of animal existence.

But let me not be misunderstood. No one can appreciate more than I do the immense service which this very spirit of independence has done, and perhaps is still doing, for the human race. The principal cause of slavery, in every age, has been the abuse of authority. The great danger in every government is the abuse of power for selfish ends. Any form of government, administered according to the law of love, will produce freedom; but the law of selfism still reigns supreme in the human heart. The great practical problem to be solved in every social organization, therefore, is so to check and balance the different forms of power and authority that the danger of abuse is reduced to a mini-This is the best freedom we can now hope for, while selfism reigns. But let us not deceive ourselves. This is not true freedom. It is a negative, not a positive freedom; it is the empty form, without the true spiritual substance; it is based upon selfism-though shorn of its power for evil-not upon love; it is the equilibrium of opposing evil forces, and therefore unstable; it is galvanized life, not real life.

Again, I freely admit also that this very spirit of

independence, which in its evil excess is so opposite to the true Christian spirit and so dangerous to society, is nevertheless born of Christianity. It is the legitimate offspring of the life and immortality brought to light by Christ. Until that time the individual man was entirely subordinate to society, his whole significance and value was as an integral element of society. But, from the Christian point of view, the value of the immortal soul is simply incalculable. Society is temporary, and belongs to this world; the soul is immortal, and belongs to the world eternal. Therefore, man is not made for society, but society is made for man. This spirit of independence, therefore, is good in so far as it asserts the dignity of the human soul; it is bad in so far as it violates the law of love. Our poor human nature has been likened to "a drunken peasant trying to ride on horseback. It climbs up on one side, only to fall over on the other." It is almost impossible to. get a good without a corresponding evil. It is difficult to find strength and dignity without something of selfassertion and pride. It is rare to find humility without something of weakness, and even perhaps of meanspiritedness. It is difficult to find zeal without also bigotry, or liberality and toleration without also religious indifference. Hence these opposites are constantly confounded with one another in the popular Everywhere we find tares have been sown among the wheat. "An enemy hath done this." But what saith the Master? "Let them grow together until the harvest, lest while ye pull up the tares ye pull up the wheat also."

Having thus spoken somewhat fully of the exterior

freedom, we now return to that upon which the exterior is based, viz., the interior or spiritual freedom.

Human government may be resisted; sometimes it ought to be resisted. The laws may be oppressive and unjust, made for one or for few and not for all, and thus may create slavery by abuse of authority. In the discord between the interior and the exterior law, the exterior may be in fault. It becomes necessary, therefore, to reconstruct the exterior in accordance with the interior. But the Divine government and the Divine law is, from its very nature, absolutely perfect. cordance with the law of that government, therefore, is freedom. The Divine law is also irresistible, and resistance to that law, self-assertion, independence, is necessarily slavery and bondage—bondage by the necessary operation of perfect law. There is no conceivable freedom under that government except by accordance of the interior with the perfect exterior law; this service is perfect freedom: there is no conceivable slavery under that government except through resistance, revolt, sin.

This, then, is the true, the only true freedom, the basis of all others. This is that freedom in comparison with which all other so-called freedom sinks into insignificance. This is the true reality, of which the other is but the external form. The external or formal freedom is valuable only as it is a help to this true interior freedom. Appropriate form does indeed help and strengthen the spirit; but, as a true worship is spiritual, and a formal worship is only good in so far as it helps the weak spirit, so also a true freedom is interior and spiritual, and the exterior freedom is good

only in so far as it helps us to attain the true interior freedom. As, in the pursuit of science, the first law is truth for truth's sake, and the second law is utility, · the first law is the upreaching of the mind for Divine truth, and the second law the distributing of this in material blessings to man; as in morals, also, the first law is love to God, and the second law is love to man -the first law, an answering of the human heart to the Divine love, and the second law the distributing of this again upon our fellow-men-even so, also, is it with freedom: the first law of spiritual life and activity is the interior freedom, like the free activity of Deity; the second law is the exterior freedom by which we communicate our interior freedom to others. Freedom! true, spiritual freedom! This is indeed happiness, unspeakable joy, blessedness. In this his will becomes our will, and yet our will is free, because his law becomes our law; and as his law is the expression of his nature, his nature becomes our nature, or we become partakers of the Divine nature; and since the whole universe, spiritual and material, is the revelation of the Divine nature, and our nature is in harmony with the Divine nature, our nature becomes in harmony with the whole universe, spiritual and material-all work together for our good, and, in the highest sense, therefore, is indeed ours.

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In the Divine government, I said, freedom is obedience to law; but obedience, not by fear, but by love. "Perfect love casteth out fear;" love is the law of freedom, fear is the law of bondage. Obedience, did I say? No; far better even than this. Obedience supposes the law of duty, and duty supposes a strong will

by force keeping the erring heart in the right way. The reign of the law of duty, therefore, is not yet complete freedom: perfect love casteth out not only fear, but also duty and obedience. This is, of course, an unattainable ideal here. The highest law which we can attain here is the law of duty. The law of duty is a school-master to lead us to freedom. But the ideal which we look for hereafter, and the contemplation of which fills us with ecstasy, is the free, spontaneous activity of our whole nature according to the law of love. In this ideal, hope is swallowed up in fruition, faith is swallowed up in sight, duty and obedience are swallowed up in love—and there remain only love, holiness, freedom.

LECTURE XII.

UNITY AND TRINITY OF DEITY.

MY CHRISTIAN FRIENDS: After an absence of many weeks, I feel a sincere pleasure in seeing again your familiar faces, and reflected there your earnest desire to hear the continuation of these lectures. In accordance with the order announced in my first lecture, I take up this evening the *Modes of Divine Existence*. The Deity is represented in Scripture as One Being under three modes of existence—as a *Unity*, and yet a *Trinity*. This is the subject of my evening lecture. The bare announcement of the subject has, doubtless, already prepared you for much crudeness and imperfection in my thoughts. I crave, therefore, the utmost leniency of your judgment.

First, then, the Unity of Deity.

In the language of Scripture, "The Lord our God is one Lord." This grand conception of Deity is so familiar to us all, and so accordant with enlightened human reason, that we are apt to overlook the wonderfulness of the fact that it was so early enunciated. Let us, then, stop a moment to contemplate this marvelous fact.

There is a mystery, an incomprehensibleness, in all things around us and within us—a mystery which man alone, of all terrestrial beings, recognizes. Religion is founded wholly upon the recognition of this mystery. Man alone, therefore, of all terrestrial beings, is religious. Religiousness and worship, therefore, are founded in the very distinctive nature of man; they are the very badge of humanity—the image and superscription of Deity.

Now, I know that it is a very common notion that it is the function of science to diminish the incomprehensible, and is destined finally entirely to destroy it; and, therefore, it must eventually destroy tne basis of religion. But nothing can be more erroneous than such a notion. Science not only cannot destroy, but does not even diminish the mystery of existence. It only increases our sense of the awfulness and grandeur of mystery. It cannot destroy mystery, it only changes the form of our conception of mystery. cannot, therefore, destroy religion; it only changes it from childish, gaping wonder, and perhaps terror, into rational worship. To the ignorant savage every thing is a separate mystery, every object a separate wonder, and perhaps a separate terror. The effect of science is to remove separate mysteries, and to show that they are all but different forms or manifestations of the One Infinite Mystery. Its final effect is to remove all mystery within mystery, the chaos and confusion of mystery, and leave only the one all-embracing mystery the Cause of existence; which, translated into the language of religion, is the One God. Thus, the effect of science and of reason is not to destroy, but to introduce

order and unity within the limits of an ever-present mystery.

Let me illustrate further the effect of science and reason upon religion. Observe, then: in the natural and uncultivated man there is a strong tendency toward materialization and indefinite multiplication of mystery-i. e., a strong tendency to materialize and multiply the objects of worship. This leads, on the one hand, to object-worship and idol-worship, and on the other to polytheism. The tendency of culture, of reason, of philosophy, of civilization, on the contrary, is, always and everywhere, toward spirituality and unity of Deity. In the lowest forms of savage life every object is a separate mystery. To the savage the mysterious, incomprehensible principle resident in every object becomes a separate deity. This lowest form of religion is called fetichism. The next step in the development of natural religion is the deification of the general agencies and forces of Nature. which rule the air are embodied and worshiped as Jupiter, the forces which rule the seas are embodied and worshiped as Neptune, and the mysterious and dread agencies at work within the earth are again embodied and worshiped as Pluto. Thus arose the polytheism of the Greeks and Romans. Again, the last and highest step-a step never reached by popular religion, but only by philosophic thought—is the recognition of one principle pervading the whole universe, and the acknowledgment of this as Deity. Thus the human reason, at last, reaches monotheism.

Now, this progress of the human mind from the material to the spiritual, and from the many to the one,

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is not peculiar to natural religion or to theology, but is universal. The development which we have just traced is but one example of a general law of the progress of human thought. In all departments the natural progress of human thought is from the concrete to the abstract, from the material to the ideal, and from the many to the one. Thus in science, as I have already explained in a previous lecture, we pass from the material and infinitely numerous phenomena, to laws which are more abstract and less numerous; from these we pass, again, to principles or forces which are still less numerous and more abstract; and from these, finally, to the recognition of one universal, omnipresent energy. This conception, translated into the formula of religion, becomes the one God. Thus also in the realm of morals: we pass in thought from the infinitely numerous duties—a separate duty for every event—to the more general laws and customs of society; from these again to the recognition of a few more abstract general principles, the ten commandments; from these, finally, to the recognition of one highest and most abstract principle. -one universal moral energy, love, which, translated into the formula of religion, is again God.

Thus you will observe, in religion, in science, in morals, the human reason passes from the material to the spiritual, from the concrete to the abstract, from the many to the one. But observe, also, that this highest point is not reached except by a slow and laborious process; that it is the last result of human culture and human thought; and that it is never reached at all except by the highest philosophical minds. Now, is it not wonderful that this very last and highest result of

human thought and human culture, viz., the perfect unity and spirituality of Deity, should be found clearly revealed in the earliest writings of which we have any knowledge, viz., the writings of Moses? Is it not wonderful that, in a time when polytheism and idolatry reigned over the whole earth, this highest conception of Deity, of which the human mind is capable, should have been so distinctly enunciated by Moses and so generally embraced by a whole people? And this conception existed not only in the mind of Moses, but in a still ruder age, in the mind of Abraham; for, although the history of Abraham is written by Moses, yet it bears the strongest marks of being the true history of a real and very grand life.

But this is not all that is wonderful about it; for, observe again: the monotheism which is reached by human reason and human culture is always a pantheistic monotheism: it is the belief in a universal principle or soul, pervading Nature, but not distinct from Nature. Such is the monotheism of the old Greek philosophers; such is the monotheism of the German philosophy of the present day. Now, such a monotheism is utterly inoperative upon the human heart and upon human life. Thus, in the progress of natural religious belief under the influence of human reason alone, in proportion as it rises to a higher and higher point, it becomes less and less operative on human life. In proportion as it meets the demands of the human intellect, in the same proportion does it lose its hold upon the human heart. Now, the monotheism of the Scriptures —the monotheism held by Moses and by Abraham—was not a pantheistic monotheism. It combined perfect

unity and perfect spirituality, with complete personality. To Moses and Abraham, God was not an impersonal abstraction, but a living, personal reality. Their conception of Deity, while it satisfied completely the demands of human reason, held fast also upon the human heart and guided human conduct. Reason passes step by step by slow gradations to reach the one God, and then only to find Him an unsubstantial abstraction. How different, in the case of Moses and of Abraham, have been both the process and the result! Is it, then, the result of unassisted human reason? It does not Shall we call it the result of genius? is genius, it is genius the fruit of which has satisfied the highest demands of the most cultivated human nature from that time to this; and will continue to do so for all time. If this be genius, it must be not human but superhuman genius.

Thus I conclude, then, that the unity of Deity is revealed in external Nature and in human nature, but only understood by highest culture and then only imperfectly. But this last term of human thought is clearly revealed in the Scriptures from the first.

But the Scriptures reveal not only perfect unity, but also trinal existence: three modes of one absolute being. These three, as you all know, are called the Father, the Son, and the Holy Spirit. Now, it is a remarkable fact, and important as, perhaps, throwing light on the nature of these distinctions, that, while unity is so clearly revealed and so strongly insisted on in the Old Testament, the trinity of Deity is, I think, clearly revealed only in the New. With the idea already in the mind, it is true we may find it in the Old also

There is, perhaps, a dim foreshadowing of this truth there. It is supposed to be found in the very Hebrew name which we translate God—"Elohim," which is a plural form, though always connected with a verb in the singular number, indicating unity, yet plurality. It is supposed also to be indicated in such expressions as these: "And God said, Let us make man"—"Let us go down and confound their language." Nevertheless, I think it will be admitted that, unless we look for it, we will not find it. It cannot be said to be distinctly revealed there.

Now, the question naturally occurs, Why is this? There are two reasons which occur to my mind. There may be many other and more profound reasons, but they are unknown to me. First: In the old era, in the time of the Hebrew nation, polytheism and idolatry were universal over the surface of the earth, with the single exception of this favored land. The moral atmosphere of the world was charged with it; it could not fail to affect the favored people. Moreover, the conception of Deity given by Moses, the pure monotheism of the Hebrew Scriptures, was far too pure and spiritual, not only for the world, but for the Hebrews. therefore, a constant tendency in this people to relapse. In spite of the threatenings and judgments of Providence, in spite of warnings and denunciations of prophets and seers, in spite of a wise legal isolation instituted for this very purpose, they constantly fell away into idolatry and polytheism. Now, you will easily see that, under these circumstances, the thing most necessary to be insisted on was the unity and spirituality of Deity. At a time when the whole effort of revelation was to preserve a pure and spiritual religion, idolatry and polytheism was justly regarded as the sin of sins, the sum of all wickedness. If Trinity had been revealed at this time, it would certainly have produced a tritheism, a form of polytheism, and thus have destroyed the unity and spirituality of Deity.

But, at the time of the coming of Christ, the old era, with its tendencies, was already dead. In the Jewish people, especially, the tendency to idolatry and polytheism had entirely passed away. Even among the Greeks and Romans, while idolatry and polytheism still lingered in a feeble state of vitality among the common people, it was already dead among cultivated thinking men; and the only semblance of religion which remained among this class was the pantheistic monotheism, already spoken of. The old religions, then, whether Jewish or pagan, were essentially dead. The soulless body was retained by the Jews as a dead formalism; the disembodied spirit was retained by the Greek and Roman philosophers as an unsubstantial abstraction. Now, under these circumstances, when the tendency toward idolatry and polytheism, among the Jews and among philosophical thinkers all over the civilized world, had passed away entirely, the revelation of Trinity could not, as before, produce the effect of materializing the conception of Deity, and would produce the effect of quickening the life of religious faith by bringing God in closer relation to man.

Another and perhaps better reason for the revelation of Trinity at this time is this: In Nature and in general providence, as Father and as universal Sovereign, the relations of Deity to us are comparatively simple, and therefore He is revealed as One. But in the scheme of redemption the relations of Deity to man are complex, and his offices and functions, in connection with these complex relations, are manifold. Thus it became necessary that the more complex nature of Deity in his relation to man should also be revealed.

Unity, and yet Trinity. Trinity in Unity. You will naturally expect me to say something on the nature of this Trinity in Unity. I do so with much hesitation.

The Scriptures, I think, quite clearly state, first, that the Three are the same in essence; in other words, they reveal essential identity; not three parts of a divided whole, but the whole in each of the Three. In the second place, they reveal essential equality. of these ideas are involved in the idea of absolute unity. In the third place, they reveal that in some sense the Three are distinct. But as to the kind of distinction and the degree of distinctness the Scriptures are absolutely silent; and this silence is undoubtedly significant. It means that we cannot form a clear conception in our finite minds of the nature, and we cannot formulate in human language the degree, of this distinction. The usual belief is, that the trinal existence is personal, and therefore that the distinction is that of Three different Persons of One Being. word tri-personality is, therefore, often used to express the idea more distinctly. But evidently the word person is here used in a different sense from that in which we use it in speaking of ourselves. My spirit may indeed reach your spirit through the senses, and affect it by sympathy; but my self-consciousness cannot touch your self-consciousness. Each of us has his own distinct circle of consciousness, and they do not and cannot touch each other. Now, we cannot believe that a separate consciousness is the nature of the distinction between the different modes of Divine existence, for this is inconsistent with unity. And yet this separate consciousness is what we mean by personality, when applied to man. If we must formulate our notions on this subject, it may be that the word "person" is the best we can use. But let us not forget that this word is not used for this purpose in Scripture; nor is it used in the first church formula, the Apostles' Creed; but appears only in the later church formularies. Let us learn from this that too great positiveness in our own opinion, and too great intolerance of difference of opinion in others, as to the nature of the distinction and the degree of the distinctness, is unbecoming to us either as Christians or as philosophers.

Perhaps it may be interesting and instructive to trace for a moment the origin of the word "person," in this connection. The early period of the Christian Church was a period of immense speculative activity in the domain of theology. It was also a period of extremely divergent and conflicting opinion. The reason is evident: the Christian religion, a new, vigorous, young system, claiming Divine origin, was just introduced. All the old philosophies, the Rabbinical, the Greek, the Eastern, are struggling for recognition and incorporation into the new system. Many of the early Christians were deeply affected by these prevailing philosophies, some by one, some by another. The result was a perfect chaos of divergent and conflicting

opinions on religious doctrines-opinions so divergent and conflicting as to threaten the very existence of the Church itself. There is not a form of sectarian opinion now existing on any religious subject but has its root in the discussions of the time of which I am now speak-Gradually this chaos crystallized into the early dogmas and formulas of the Church. To a more limited extent the same thing has taken place repeatedly since. In fact, these changes are in strict accordance with the law of all human progress. In every department, in politics, in religion, in science, the law of progress is the same; the higher and more complex the department, the more marked the law. In every department the body of human knowledge passes through alternate conditions of chaos and of order—of disintegration and reintegration, of solution and recrystallization. tem of knowledge or belief, however perfect, soon gathers and incorporates new elements, thoughts, ideas, As a necessary consequence there follows disintegration, in order to reorganization into higher forms -resolution, in order to incorporation, into the solution, of new elements, and then recrystallization into yet higher and more beautiful forms. The religious world seems, just now, to be in one of these states of chaotic opinion, in a transition state, a stage of disintegration, a stage of solution, caused principally by the mass of new elements introduced by science. Some persons think it will result in the final disintegration and destruction of religion. But those who understand the law of the progress of philosophy, and especially those who have studied the history of the Church, have no such fears. Religious belief is only preparing, by the

incorporation of new elements, to crystallize in a higher, more rational, and more beautiful form.

Now, the time of which we were speaking was just such a transition period. The chaos was such as to threaten the very life of the Church. Councils were therefore called, in order to settle the dogmas of the Among the points to be settled was the very one of which we are speaking. The opinions of some on this subject were such that their notions of Unity swallowed up the idea of Trinity; the opinions of others were such that their notions of Trinity completely destroyed the idea of Unity. It became necessary, therefore, for the Church to define more clearly its belief on this subject. It must formulate its belief. doing so it used the word *Person*, and the formula became "Three persons and One essence." But, I repeat, let us not forget that these words are not used to express this distinction, either in the Scriptures or in the Apostles' Creed.

Perhaps it may be instructive to remark here that all sects and divisions of the Church are based, not on Scripture, as many imagine, but upon Church formulas; and these formulas are always the result of attempts to conceive more clearly, and formulate more distinctly, certain religious ideas, than they have been formulated in Scripture. It may be necessary, on account of the centrifugal tendency of opinion, to formulate beliefs; I believe it has been necessary to do so; but I believe, also, that in the progress of religious thought it will become less and less necessary.

Unity in Trinity, Trinity in Unity! Some will say, many have said, "This is utterly incomprehensible,

and therefore irrational. I answer, It is, indeed, incomprehensible, but not, therefore, irrational. Rationality is accordance with reason, which is accordance with Nature without and Nature within. Let me, then, try to show you that the idea of Trinity in Unity is not discordant with Nature, and therefore is not discordant with reason. For this purpose I will only throw out two thoughts by way of suggestions, and ask you to reflect on them.

I. As already said, in all existence there is that which is incomprehensible and mysterious. This is the basis of religion. As already explained, also, the incomprehensible can never be destroyed, it cannot even be diminished by the advance of knowledge. Now, further: In all things divine, yea, in all the deepest questions of human philosophy, there are two points of view which are irreconcilable, and therefore incomprehensible by human reason, and yet which must both be accepted by reason as true.

Let me illustrate by an example: The absolute, unconditioned being and absolute sovereignty of Deity, and yet the free-will of man—both of these must be true. Absolute, unconditioned being—all-embracing, all-controlling, this must be the essential nature of Deity—any thing short of this falls below the imperative demands of the enlightened reason. Nevertheless, the free-will of man is also certain; otherwise the moral nature, the responsibility of man, and all that is based on it, government, society, culture, reason itself, in a word, humanity, is destroyed, and man is no longer man. But the relation of these two certain and undoubted truths to each other we cannot comprehend. We can-

not reconcile them, yet they must be consistent with each other. Their point of reconciliation is beyond the limits of our mental sight.

Take another example: All Nature as well as all Scripture reveals an immutable Deity. Any other conception is repugnant to enlightened reason. Yet every one of us, when we assume the attitude of prayer, must believe that in some sense we affect the mind and change the purposes of Deity. How to reconcile these two perfectly, we know not; yet they must both be true. The one is necessary to a just conception of Deity, and therefore to the requirements of enlightened reason; the other is necessary to the culture, yea the very existence of our religious nature, which is the basis of our humanity; they must be reconcilable, but their point of reconciliation lies beyond the limits of our mental sight.

Take yet another example: By studying man purely from the spiritual point of view, by turning the mind inward upon itself, and examining its operations only as revealed in consciousness, philosophers have succeeded in building up a purely ideal philosophy which makes the whole material world a mere illusion, an external projection of internal states. But commencing from the contrary point of view, from matter and material phenomena, and turning the mind ever outward, other philosophers, especially in these latter days, have built up a tolerably consistent philosophy which ignores the existence of spirit, and makes it a mere illusion. Now, these two philosophies are both founded upon true bases, both built up according to the laws of reason, and therefore both in a certain sense true;

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but how to reconcile them completely we do not yet know. They must be reconcilable, but their point of reconciliation lies beyond the limits of our present mental vision.

I might carry the examples much further. Even in the department of science there is one philosophy which refers all phenomena to force, and abolishes matter; another refers all to matter, and abolishes force; while true practical philosophy accepts both force and matter.

Thus it is in nearly all questions of philosophy. If we trace them deep enough, we find two irreconcilable views. There is a fundamental antithesis in all human philosophy, and this it is which constitutes the true enigma of the Sphinx.

There are many such questions presented in Scripture, but the Scriptures never attempt to solve them, because it is impossible to make the solution intelligible to the human mind. They simply show one side, and then turn the other. They give the one side, because this side is necessary to a just conception of Deity, and therefore a necessary condition of a pure religion; they then turn the other side, because that is necessary in order to bring Him into intelligible relation with finite beings, and is, therefore, the necessary condition of a practical religion. Now, Trinity in Unity seems to be one of these questions. Unity is absolutely necessary to a just conception of Deity; Trinity brings Him into closer relation with us, and makes religion more practical and more vital.

In the case of some of these insoluble questions, in the highest flights of thought we sometimes catch imperfect glimpses of a partial solution, of a partial explanation of the apparent antagonism. As we trace the two lines of thought with straining vision upward higher and still higher, they seem to approach, we see they must meet; but their point of actual and perfect union is beyond the limits of our sight. is it, also, to some extent, with the three modes of Divine existence. As we gaze upward higher and still higher, they seem to converge and approach, but their point of union is lost in the insufferable light of the Absolute. We have said (Lecture IX.) that revelation is a down-reaching and ramifying process; that Deity in self-revelation reaches down toward us, separating and ramifying until the extreme rootlets of revelation fix themselves in our sensuous nature, thus taking firm hold, in order to draw us again upward. Now, these three seem to be the first three great branches in the downward course of revelation from the Absolute to man. The point of separation is too high, too near the Absolute, for us to contemplate steadily.

II. Again: as already said, the function of reason is not to remove mystery, but to introduce order within the limits of mystery. Human nature is essentially finite. We are limited, bounded, and conditioned, on every side. We are imprisoned, "cribbed, cabined, and confined," by these limits and conditions, as by an impassable surrounding wall. Now, the domain of reason is within the limits of these conditions, within the circle of this wall. The domain of the incomprehensible, of mystery, and therefore of faith, is on the other side of the wall. It is the duty of reason to con-

¹ See Lectures XVIII, and XIX.

quer all within, it is the province of religion to worship the incomprehensible beyond. Now, this distinction has not always been clearly understood. In the olden times the proud human reason dared to believe that its domain was boundless. The whole effort of the proud old Greek philosophy was to break over the bounds of knowledge and penetrate the essential mystery. wasted its strength in vainly chafing against these bounds. In its proud determination to find out what was beyond the wall, it neglected the whole area within the wall. In its determination to know what matter is, it despised to learn what matter does. In its determination to know what the essence of spirit is, it neglected to study the properties and phenomena of In its determination to attain the unattainable essential knowledge, it neglected the attainable, revealed knowledge. Thus, matter, spirit, God-these were the questions of the old philosophy. Absolute being, existence—these it determined to solve the mystery of. Alas! the spirit of the old philosophy is not yet dead. Similar questions even now vainly agitate the minds and waste the strength of the philosophers of Germany.

Science, on the contrary, far more wise and far more humble, recognizes the bounds of human reason. She recognizes the impassable wall which surrounds us. What lies beyond she leaves to faith, and expends her whole strength in conquering what lies within. The whole progress of science has been the result of the recognition that human knowledge is phenomenal, and not essential—that essential knowledge belongs to God, phenomenal or revealed knowledge belongs to

man. But the proud spirit of the old philosophy, though driven out from the domain of Science, still lingers in the domain of Theology. Theology still discusses, in the spirit of the old philosophy, many abstruse questions which evidently lie beyond the domain of human reason. Theology, for example, still wastes its strength in vain attempts to comprehend and formulate the nature and degree of the distinction between the different modes of Divine existence—the nature of Trinity in Unity.

Is there not, then, a domain of human reason in questions like these? If so, what is it? I answer: Precisely the same as in all other questions. Let me illustrate; and for this purpose I will take one of the simplest and best understood of all subjects, viz., the subject of universal gravitation. There is clearly a domain of reason here, and right royally has reason subdued it. But there is also a mystery here, a something which lies beyond the domain of reason. It is impossible for us to know what gravity is in its essential nature. We may call it a form of Divine energy; but this is the formula of faith, not of science. No scientific man for a moment imagines that he can ever know Even though we should reduce all force to molecular motion, the cause of molecular motion must still remain inscrutable to reason. Faith calls it God. It is the duty of reason to acknowledge, but not her domain to comprehend, God. What, then, is the domain of reason? I answer: Not what gravity is, but what gravity does—the phenomena of gravity, the laws of gravity, and especially the universality of gravity. The rational view of the motion of celestial bodies is

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the recognition of the fact that the same law and the same force which control the falling of a stone, guide these, also, in their fiery course. In other words, the function of reason is to establish the universality of gravity throughout all space. To prove this, is to make celestial motion comprehensible and rational, in the human sense of the term; and there is no other way of making it rational.

Now, similar is the domain of reason in all subjects, similar is its domain in this subject of Trinity in Unity. It is not to solve its essential nature, but to show, if possible, its universality—to trace, if possible (I do not say it is possible), its impress everywhere on Nature within, and Nature without. If we do that, we make it comprehensible and rational in the human sensethe only sense in which it can be comprehensible and rational to us. This is the true and only domain of reason on this subject. The ground upon which we may hope for rational knowledge here is this: The works of Deity must be in the image of Deity. must impress his nature upon all revelation. If this nature is Triune, something like Triunity ought to be traceable in all his works, but more and more perfectly in proportion as the Divine image is more perfect, and therefore most perfectly in man. Now, can we trace any thing like this in Nature? I sometimes think we can dimly trace something like this in all revelation. It seems to me we can trace it first in the three great attributes which reach down and take hold of man-truth, love, holiness. We can trace it again in the threefold spiritual nature of man, answering back to God and reaching upward to take hold of Him: the

intellect, taking hold of truth; the heart, taking hold of love; and the will, taking hold and embodying holiness in life and conduct. It seems to me, again, we can trace it in the three great spiritual pursuits of men, the only three human pursuits which pass beyond this world and take hold on things eternal—science, religion, art: science, which seeks Divine truth; religion, which seeks Divine love; and art, which seeks the Divine beauty of holiness. The first is the human embodiment of Divine love and goodness; the third, the human embodiment of Divine harmony and beauty.

Perhaps I might go further and trace it also in external Nature, but here the image becomes too dim and uncertain. It may be impossible, now, and in the light of present science, to trace it any further with confidence, but the domain of reason is there, and only there. It seems to me, then, that while theologians have wasted their strength in trying to attain the unattainable, here is a mine which is yet almost untouched.

LECTURE XIII.

INCARNATION OF DEITY.

MY CHRISTIAN FRIENDS: The subject of my lecture this evening is the *Incarnation of Deity*; a subject so vast and so profound that what I shall say must necessarily be imperfect and fragmentary. I almost fear to touch a subject so sacred and at the same time so profound.

You will remember that in my last lecture I spoke of Deity as One Being under three modes of existence. Now, the Scriptures teach us that one of these, in the fullness of time, became incarnated in the man Christ Jesus; that one of these became visibly manifest and embodied in flesh as our fellow-man, our friend, our brother; that he who was the Son of God became also the son of man, a name by which he loved to call himself because it brought him nearer to us; that he thus became manifest in order that he might the more perfectly reveal to us the nature, the love, and especially the fatherhood of God and thus teach the brotherhood of humanity. No wonder that this is regarded by Christians as the dearest and most sacred doctrine of Scripture. If the belief in Deity is the foundation of natural religion, surely the belief in an incarnate Deity

is the corner-stone of the *Christian* religion. If we reject this, we reject that which is most characteristic in Christian faith.

Now, this doctrine has always been the stumblingblock and rock of offense of the so-called rationalists. They say it is incomprehensible, irrational, absurd. Now, I admit at once that it is in its deepest sense incomprehensible, but I do not admit that it is therefore As already explained in a previous lecture, all things when traced to their deepest essence, all questions when traced to their deepest meaning, are incomprehensible. But this, like many other profound truths, is partly also comprehensible. Like the grandest conceptions of Deity — like the highest spiritual truths—it may not be reached directly by reason; but, being once clearly revealed, it is found accordant both with reason and with all the yearnings of the human heart. It may be that unassisted we would never find it revealed in Nature or in the human heart; but, being first clearly revealed in Scripture, we then find the dim revelations of it, also, in external Nature and in the nature of man. To show this will be the principal object of this evening's lecture.

I must again repeat what I have already so often said, viz., that there is a mystery in all existence; that essential knowledge is not for man, but only revealed knowledge. All the materials of knowledge are therefore furnished us, freely given us through revelation; and the whole function and domain of reason is to arrange and combine, and thus gradually to build up out of these materials the complex fabric of human knowledge. It is just as impossible for reason to make

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the raw materials on which it works as it is for the chemist to make the elements on which he works: in both cases these must be furnished to hand.

Let me illustrate: Nature is a pure revelation. Even the existence of external Nature cannot be proved by reason. But, admitting the existence of an external material universe, what matter is we know not, and reason cannot tell us. All we know is, how the material world reveals itself to us as phenomena. these phenomena, again-reason cannot prove them nor make them more certain. Thus, neither the existence of the external world, nor the essential nature of matter, nor the properties and phenomena of matter, can be proved or made more certain by reason. All these are received by faith; they are the raw materials of knowledge; they form the basis of reasoning, and therefore are already more certain than any thing can be made by reasoning. Frankly accepting these revelations of truth through our senses, these materials furnished by faith, reason then combines them according to certain laws, and gradually constructs out of them the temple of science. In proportion as this temple of science, the work of man, is in accordance with the temple of Nature, the work of God, is the human work good and true.

Precisely the same principles apply to the study of the world within. The facts of the spirit-world are revealed to us through consciousness. They are ultimate facts, which cannot be proved by reason, but which we always accept by faith. We believe them, but cannot prove them; nor do they need proof, since they are already more certain than any thing can be made by proof. They are the materials out of which reason makes knowledge. With these materials she gradually constructs the complex fabric of what we call mental science or psychology.

So, precisely, I think, ought we to regard and deal with the sacred Scriptures. If we admit these as a Divine revelation, then ought we to accept the facts and truths revealed clearly there as the materials of knowledge; and the only domain of reason is to arrange and combine these materials into an organized body of knowledge; to show law and order and consistency throughout; and thus gradually to construct the fabric of theology.

You will perceive, therefore, that in these three revelations are furnished all the materials of human knowledge. They are furnished by revelation and accepted by faith, and then used by reason to construct the fabric of human knowledge. Revelation, therefore, through faith, furnishes the materials; reason is the builder. This is the domain of reason in each of these three. There is still another and higher domain of reason. It is to show the accordance of these three with one another; to combine these three subordinate temples into one, and thus to construct the glorious triune temple of perfect philosophy. To contribute something in this direction has been the object of these lectures.

I assert, therefore, that, admitting these three as revelations of Deity, I have truly limited the domain of reason. The importance of this view cannot be over-estimated. It lies, I believe, at the very foundation of all rational philosophy. But in these times it

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is the fashion to ignore the limits of reason. It seems to me that the very evil of this age, the form in which the spirit of evil appears in these latter days, is the pride of human reason. This is the spirit of so-called rationalism. It would seem as if the human reason, on subjects of theology, had been so long repressed, that, in the joy of its new-born liberty, it asserts the boundlessness of its powers and the limitlessness of its domain. In its pride it passes beyond its own domain, and invades the domain of faith, and thus destroys the only foundation upon which itself can build.

There is, then, I believe, in the world at the present time, very rife and fashionable, a false spirit of rationalism—a spirit that arrogates to itself the name of rationalism, as if it alone followed the laws of reason and the methods of science, when, in fact, it knows nothing of either, nor even understands the domain of reason itself. Hence, rationalism, or the use of reason in the investigation of religious truth, has come to be regarded as inconsistent with faith, and synonymous with skepticism; and faith, on the other hand, has come to be regarded as necessarily blind and irrational. But there is a true use of reason as well as a false use of reason; there is a true spirit of rationalism, as well as a false; or, rather, I should say, there is a true rational spirit, very different from this false spirit of so-called rationalism. The false spirit tries every fact and every duty and every truth at the bar of reason, even imperfect, unenlightened reason; not remembering that reason itself is only cultivated through revelation, and therefore through faith. The true rational spirit, on the contrary, accepts revelation, and tries to bring the

human reason in accordance with it—accepts, and then tries to understand the revelation.

The great difference between the true and the false use of reason is clearly shown in the history of the study of Nature. The old philosophy arrogated to itself the power to impose laws upon Nature. It disdained to sit humbly at Nature's feet, and spell out letter by letter her revelations. No; man is lord of Nature, and must therefore find the laws of Nature within himself. These proud philosophers attempted to evolve a philosophy of Nature from within, from the laws of thought. thus enacted what they supposed ought to be, and therefore must be, the laws of Nature. But Nature refused to be bound by their laws. A true science, on the contrary, far more humble, in the true rational spirit, regards Nature as a Divine revelation, approaches with reverence, and sits at her feet and learns from her her laws, instead of imposing on her its laws. Science has learned that in order to be masters we must first be pupils.

Now, this proud false spirit, though expelled from science, still lingers in the domain of metaphysics and especially of theology. But as, in Nature, we cannot, by reason, construct a true philosophy, until we first accept her teachings as a revelation; so also, if we acknowledge Scripture as a Divine revelation, ought we to limit the domain of reason to the organization of the materials there given, and then to show their accordance with other forms of revelation. How shall I sufficiently strongly contrast this hateful false spirit with the true rational spirit? The true spirit of rationalism accomplishes every-thing, but thinks little of its own achieve-

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ments: all our knowledge has been achieved by this spirit, and yet it regards itself only as a little child gathering pebbles on the shores of a boundless ocean of truth. The false spirit of rationalism, on the contrary, accomplishes nothing itself, but takes what has been accomplished by the other spirit, and then draws its own grand but hasty conclusions. It indulges ever in self-glorification, in self-gratulation; it spreads its peacock plumes, and struts; it blows its trumpet, and cries, "See what glorious things have been done by human reason!" The false spirit of rationalism exalts reason in self, and despises reason in others, especially in former ages. The true rational spirit distrusts reason in self, and honors reason in all men and in all ages. A wise child listens to the words of his father, believes them, and then tries to understand them. This is the domain of reason for him; this is the true rational spirit. In this way only can he learn any thing. We, also, are little children of a loving heavenly Father, who is anxious to reveal himself to our imperfect understandings. If we accept his revelation, we will finally learn to understand it; if we do not accept, we will remain in darkness and ignorance forever. It is in this true rational spirit that I would approach the subject of incarnation. I wish to use reason upon the materials furnished us by revelation.

We have seen, then, that the function of reason is not to acquire essential knowledge, but rather to show law and order extending throughout revelation. On the subject of incarnation, therefore, the true domain of reason is not the essential nature of incarnation; it is not the essential nature of the union of the Divine

and the human; it is not to solve the essential mystery of the God-man; but it is, rather, to show, first, that all Scripture is in harmony with this doctrine; and, second, that the doctrine is also in accordance with the revelations of external Nature and of the human heart. In other words, it is to show, if I may so speak, a universal law of incarnation; to show that incarnation, or something analogous to it, is found in Nature and required by the human heart. In so far as we show this do we make the doctrine comprehensible and rational. To show the accordance of this doctrine with all Scripture revelation is the part of theology. Doubtless you have all been made familiar with it by the teachings of the pulpit. I shall not, therefore, touch it, but take it for granted. But it is my part to show that it is accordant also with the revelations of external and internal Nature.

Grant then, only, first, the love and fatherhood of God; that fatherhood which the Incarnate Son came to reveal; that fatherhood which even the skeptic clings to, although he forgets to be grateful to Him who revealed it; admit the fatherly love of God and his infinite desire to elevate man and to bring him nearer and nearer, and make him more and more like to himself—admit only this, and the necessity of incarnation is almost self-evident.

Remember, then, in the first place, that all human culture comes through revelation of the nature of Deity; revelation in external Nature, revelation in human consciousness, revelation in Scripture. It is from these three books that all our knowledge and our culture are derived. Only in proportion as our thoughts

become like his thoughts, our will like his will, and our heart like his heart, are we elevated, ennobled, and cultivated. There is no other human culture but this.

Remember, again, that our sensuous nature is so strong, and our spiritual nature so weak, the human spirit is so deeply bedded and drowned in a sensuous and material nature, that it is impossible for spiritual things to reveal themselves to us except through material, and especially through human, forms. stance, the thought of one man cannot reach the spirit of another, except by sensuous forms of some kind, by words or gestures, or far more perfectly and clearly by visible embodiment in the form of an instrument or The most beautiful imaginings of poetic genius produce little impression on the poet himself, and none whatever on others, until they clothe themselves in the glorious form of noble verse. A noble or a beautiful human spirit, the most noble and beautiful of all things on this earth, cannot produce its fullest effect on us unless it reveals itself in a noble or beautiful human form. Our religious emotions and sentiments cannot produce their fullest effect upon ourselves or upon others unless they embody themselves in appropriate forms of worship.

If this be so in human things, how much more must it be so in the more incomprehensible Divine things! Divine things, therefore, must reveal themselves to us in material, and especially in human, forms, in order to impress our minds and hearts. Thus truth, Divine truth, cannot impress us unless it first embodies itself in a material nature. But this is not enough; it must again come down and embody itself in the human form

of science. Divine beauty—the beauty of holiness, must first embody itself in the beauty and order of Nature. But this is not enough: in order to touch us fully, it must come down still lower and embody itself in the form of human art. The love of God also embodies itself in the general beneficence of Nature's laws. But this is not enough: it must come down and walk the earth; it must embody itself in the form of an organized society, the Church; it must embody itself in the forms of good men living here among us.

If, then, all things Divine reveal themselves, and can reveal themselves to us, only through sensuous and especially through human forms, is it not natural, is it not rational, is it not necessary, that the Divine nature, the Divine essence, the Divine person, if it reveal itself at all, should do so in human form? The infinite love of God necessitates the revelation; the nature of man necessitates the form. If the face of Moses after communion with Deity must be veiled, how shall the insufferable light of the Absolute be revealed to us unless it be veiled in human flesh?

All culture, we have said, comes to man through revelation. The whole work of God, in relation to man, is progressive self-revelation, a more and more perfect manifestation of himself. Nature is such a manifestation—a revelation, an image of Deity. In a higher sense, man, the crown and king of Nature, is a manifestation, a visible expression of the Divine nature, a revelation of Deity. In a higher sense than Nature, he is an image of God; he is an image in flesh, an incarnation of Deity; he is more, he is a child of God. In a still higher, in the highest sense, Christ, the ideal man,

the Divine man, the crown of humanity as man is of Nature, the Lord of both man and Nature-in a higher, a Divine, incomprehensible sense, is he the visible manifestation, the revelation, the incarnation of Deity; in the highest sense is he the image of Deity, "the express image of his person;" in the highest sense is he the Son, "the only-begotten Son of the Father." Thus we find throughout all time a progressively more and more perfect revelation of Deity. As Nature throughout all time reached upward to attain its crown and king in man, so humanity has struggled upward until it attained its crown and king in the Divine man. Nature through all time struggled ever upward until it attained life in organisms. The organic kingdom then struggled upward until it attained rational life in man. So humanity struggled upward to attain Divine life in Christ. Is not the incarnation of Deity, then, in harmony with all Nature?

Again: I have said that Nature is the image of God; that, in a higher sense, man is the image of God; that, in a still higher, Divine sense, Christ is the express image of his person. All revelations, therefore, are images of Deity. It is impossible that man should apprehend Deity, except through images. In all ages, the human heart has felt this. In all ages and in all nations, there has been an intense yearning of the human heart for visible manifestations, incarnations, images of Deity. This is the rational basis of universal idolatry. Man must have, will have, an image of Deity. Not content with the images of Deity given in Nature, he constructs images with his own hands. In the higher forms of natural religion, these

images are in the human form; in the highest forms of natural religion, as that of the Greeks, they assume the ideal human form. From these attempts of the human mind to realize the Deity have resulted the noblest and most beautiful representations of human form which the world has ever seen. Thus idolatry, in its origin, is not, as many imagine, unmixed diabolic evil. It is rather the effort of the human mind to realize God. The human mind embodies its purest and highest conceptions in visible images, and then calls these gods. Nevertheless, these images of Deity, however beautiful, must be caricatures of his infinitely perfect nature. Now, this universal yearning instinct of the human heart, has it no corresponding objective reality? Is it never to be satisfied? Yes, like every other instinct, it must have an objective reality corresponding to it; like every yearning of the human heart, it must have its rational satisfaction. It finds both in the Christ, the incarnate Deity, the Divine man.

Incarnation, then, as all will admit, is in complete accordance with the revelations of Scripture. It forms, in fact, the central point of Scriptural revelation. The whole Old Testament finds its fulfillment, and the whole New Testament takes its rise there. Again, we have just shown that incarnation is also in accordance with Nature, both external and internal; that it fulfills the demands of reason and the yearnings of the human heart. It is, therefore, the central point of all philosophy. Again: All ancient history, both sacred and profane, through prophets, through types, and through idol-worship everywhere, points to, and finds its fulfill-

ment in, the same object. All modern history, too, takes its rise there. Long lines of light come streaming down the ages, converging and meeting in this one focal point. From this same intense focal point issue again streaming lines of light which, diverging, cover the earth, and are destined, eventually, to regenerate humanity. Thus incarnation is also the central point of all history. Is not this, then, indeed, "the light of the world?"

Last of all: Much of what I have said is admitted even by the rationalists themselves. The day is past when skepticism sneered and derided the Scriptures, and Christianity, and Christ. On the contrary, it is now respectful, and apparently friendly, and even patronizing. The old skepticism was an open enemy; the new skepticism is the false friend. It approaches with the utmost politeness, inquiring, "Art thou in health, my brother?" and then smites "under the fifth It says of the Scripture, that it is the noblest rib." of human productions; full of the most glowing poetry, the simplest yet sublimest narratives, the divinest system of morals. It says of Christ, that he is the greatest of all reformers, the grandest and purest of all human characters. It says of Christianity, that it is the noblest of all human institutions; but that it is human, and, like all things human, it must pass away, and is, indeed, even now passing away.

Their mode of reasoning is ingenious; it is this: All things human are *relative*, and therefore *transitory*: every system of doctrine is true, and can be true, only *relatively*; that is, for us, in our present state of advance. Every institution is good or bad,

only relatively; that is, for us, in our particular stage of human civilization; and, therefore, that every system of doctrine and every institution is necessarily only subservient to the progress of humanity; and, having subserved that purpose, it must pass away; having run its cycle, it becomes useless, and is cast off like a worn-out garment, and makes way for some higher system or institution. These things, they say, are but agents of human progress—they are ladders, by means of which the human spirit climbs until it reaches the platform above, and then, being of no further use, are left to decay, or are spurned by the foot which they lately supported. The ideals, they say, which these systems present, are but goals on the way of advancing humanity; we reach one only to see another; we press forward again only to reach, to pass by, and to press still onward. Christianity, they say, is indeed the grandest of human institutions; it presents the highest ideal ever yet presented to humanity; it has been great enough and high enough to carry forward the human race for nearly nineteen centuries; but, like all human things, it must pass, it is even now passing, away. It has accomplished its purpose; it has finished its cycle; it has carried forward humanity as far as it can; it is even now dying; it is already dead. So far from being any longer an agent of progress, it is now but a dead carcass about the neck of humanity, impeding the freedom of its onward movement.

Now, the answer to all this is, it seems to me, very plain. Observe, we must reach the ideal or goal, and see another farther forward, before we can press on;

we must climb to the top of the ladder, and stand firmly on the platform above, before we can afford to spurn it away with our feet, and before we can erect another and climb higher. The system, or institution, must have accomplished its purpose, before we can propose to ourselves a higher purpose. Now, is all this true of Christianity? Have we, indeed, reached the Christian ideal, and do we already see another and a higher? What is the Christian ideal of morality? It is supreme love of supreme perfection, the perfect love of the absolute ideal, and love to our fellow-men equal to that given to ourselves. What is the Christian ideal of character? It is that which is presented us in the life and character of the Divine Master. Have these ideals, then, been already left behind, and do we see another and a higher? On the contrary, it is not only yet unattained, but absolutely unattainable. Even the skeptic must admit this. It is an absolute, not a relative ideal; it is impossible for the human mind even to conceive a higher. An absolute ideal! is this but a Divine ideal? It is true that all human institutions and all human systems must pass awaythat they are good and true only relatively. Christianity, therefore, also, in so far as it is human, in interpretation of Scripture, in the forms of church organization, and in the forms of worship, is and must be subject to the law of change. But the ideals of Christianity, the spirit of Christianity, and the truths of Christianity; these are not human, but Divine-are not fleeting, but eternal.

The general law of development is one. As the gradual development of the organic kingdom through-

out all geologic times took place, first by change of species into higher and higher forms, whether by substitution or by transmutation, until the coming of man; and then the progress is taken up and carried forward by the gradual progressive development of the human species; so also the development of humanity, throughout all history, has been, first, by change of species of institutions, and the introduction of higher and higher forms, until the coming of Christianity; and now the progress is taken up and carried forward by the gradual development of this Divine species of institution.

LECTURE XIV.

THE GENERAL RELATION OF THEOLOGY TO SCIENCE.

My Christian Friends: In all my lectures thus far I have tried to show a general accordance between the teachings of Scripture and the teachings of Nature. I have tried to show that the truths revealed in the one are also revealed in the other. But some one will say, perhaps many have already said: "Is there not a radical discordance between these two books in many passages? Does not skepticism draw its weapons principally from the armory of Nature? If some departments of science and some departments of Nature seem to be in general accordance with Scripture, are there not other departments, especially geology, in which there seems to be a fatal discordance?" It is indeed true, I frankly confess it, that, according to traditional interpretation of Scripture, there are many particular passages which seem to be in discordance with the teachings of Nature. But let me ask you, shall not the general spirit of the two books outweigh what seems to be the literal interpretation of some passages? Shall not the accordance of the two books, in those grand spiritual truths which form the basis of religion, overbalance apparent minor discrepancies in matters

which are of little spiritual significance? Nevertheless, lest some persons should be distressed in mind by these apparent discrepancies in particular passages, I have determined, in this lecture and the next, to take up this subject. It seemed to me appropriate that, in connection with, and introductory to, the subject of man, which will occupy the remainder of these lectures—man the crown of Nature, and the culminating point of the whole history of creation—I should say something concerning the supposed discrepancies in this history, as recorded in the two books.

Throughout the whole history of Christianity, from the earliest times until now, there have been from time to time collisions between religious faith and the prevailing systems of philosophy. We find it first in St. Paul preaching the unknown God to the scoffing philosophers of ancient Athens; we find it again in the metaphysical discussions of the schoolmen of the middle ages; we find it again, and more severe, in the conflict between faith and the acute metaphysical philosophy of Hume; and last of all, and most serious of all, in the conflict now going on with the material philosophy of the present day. The enemy has incessantly shifted the field of conflict from one ground to another. it is in the field of metaphysics, then in the field of science. In the field of science, again, it is first in the department of astronomy, then in the department of geology and natural history. Wherever the intellectual activity is greatest, there we find the field of con-

The general result of these collisions has ever been the same. In every case Christianity has risen from the contest stronger and purer, and is this day, I believe, stronger and purer than ever before. How different, in this respect, is it from all other forms of faith! These simply succumb unresistingly before advancing knowledge—like shadows, or spectres, they simply disappear before the light of science. Christianity, on the contrary, loves the light, seeks the light, lives in the light; it loves the truth, seeks the truth, lives in the truth; its Divine founder was both light and truth. Is this the nature of spectres and shadows? Is it not rather the nature of a permanent living reality? The last conflict has been longest and most deadly. It is still going on. But those who have studied the history of such conflicts cannot doubt the final result.

What, then, are the subjects of conflict? What are the points of discrepancy between the two books? We will very briefly mention the most important.

The Scriptures, according to traditional interpretation, seem to teach—1. That the age of this earth, and of the whole cosmos, is about six thousand years or earth-revolutions. 2. That creation took place by successive instantaneous acts in the course of six natural days or earth-rotations. (Let me here draw your attention parenthetically to the enormous improbability, not to say absurdity, that the steps of evolution of the infinite cosmos should be determined by the rotations of this our little earth!) 3. By traditional interpretation, it seems to teach that death reigned from Adam until now.

On the other hand, Nature seems very plainly to teach the inconceivable antiquity of the earth and of the cosmos. Again, it seems to teach that creation

took place, not by instantaneous acts occupying in all six natural days, but was a gradual process of becoming—each successive condition of the universe having come out of the previous condition by a gradual process of evolution according to law. In the third place, it seems to teach that death has reigned from the beginning of organic creation until now; that death and life are correlative; life cannot exist without its counterpart death, and therefore they are coextensive, and that during an inconceivable lapse of time. You see the discrepancy.

I have mentioned these as the best examples of discordance between the supposed teachings of Scripture and the clear and undoubted teachings of Nature. There are many other questions in which there seems to be a similar discordance, but they are not yet so perfectly settled in science as those mentioned above. Even upon these first-mentioned questions the dispute has not yet been adjusted,—even upon these the conflict still goes on. Or, if upon these the teachings of science be accepted by all the most intelligent theologians, vet the conflict still goes on upon other questions: it may be the universality of the deluge, it may be the unity or diversity of the human race, it may be the antiquity of man, or the origin of species. These questions settled one way or the other, as eventually they will be, other points of dispute will certainly spring up. We never can expect the conflict to cease, so long as science continues to advance. The conflict must be perpetual, and the distress and doubt occasioned thereby to the religious mind must also be perpetual, unless we rise to a higher and more philosophical point of

view. It is the object of this and the next lecture to bring your minds to this higher and broader view.

It is, of course, impossible, and would be useless, for me to take up each of these questions. If I could adjust these, others would quickly rise. My object, therefore, is rather to adjust, if possible, the general relations of science and theology. I wish to show that these two have the same general end and object, viz., the seeking of Divine truth; I wish to change, if possible, their angry conflict into generous emulation.

The science of astronomy is so old, its truths so long and well established, and the changes of interpretation of Scripture necessitated by the discovery of these truths have been now so long accepted, that any attempt to adjust the claims of astronomy with those of theology would be considered unnecessary. We even look back with wonder at the disturbance of religious faith produced by these truths when first established. But with geology the case is quite differ-Geology is born of the present century. generation is not yet gone which saw, and perhaps despised, its helpless infancy. It has advanced with such prodigious strides, it has opened such immense and unexpected fields of intellectual vision, its truths are of so startling a character, and have followed each other in such quick succession, that the popular mind is wholly unprepared to adjust their relations with faith; religious faith has not yet been able to incorporate these truths and to assimilate them to itself, as it eventually must and will do. Thus every step in the advance of the science of geology has tended to sap, and finally to overthrow, our faith in certain dogmas concerning the antiquity of the earth and the introduction of death, dogmas which we have learned at our mothers' knee, and taken in with our mothers' milk; dogmas which, therefore, have been loved and reverenced as Divine truth. These objects of our love and reverence, these our household gods, these images of Divine truth (for have they not been proved to be images made by ourselves?), these images of Deity have been rudely torn from the sanctuary of our hearts, and by some inconsiderate iconoclasts in science have been even trampled upon and defaced. In an agony we are ready to cry out, in the words of Micah to the plundering Danites, "Ye have taken away our gods: what have we more?"

Now, my Christian friends, I do believe that we cannot do a man a greater and a more irreparable injury than to unsettle in any way his religious faith. Faith is the very fountain of all noble activity. out faith of some kind nothing worthy was ever accomplished, either for this life or the life to come. faith may be lower or higher. Ut may be only faith in self, it may be faith in our destiny, it may be faith in humanity, it may be faith in a loving heavenly Father: but without faith of some kind there never was and never will be a noble or successful life. Life is noble in proportion to the nobleness of faith; it is successful in proportion to the fixedness of faith. There is no form of religious faith, however gross, no, not even idolatry or superstition, but is better than no faith at all. Superstition may be spiritual deformity, but unbelief is spiritual death. The light of science is indeed a glorious light—a light absolutely necessary for the perfect growth of the human spirit and its development into forms of perfect beauty and strength, a light absolutely necessary to the tree of humanity, in order that it should bear flower and fruit worthy of its divine origin; but, unless this light be assisted by the dews and showers of heaven received only through faith, it only scorches and withers and blasts; where we look for luxuriant verdure and abundant harvest, we find only blackened trunks and naked, outstretched limbs—noble trunks, it may be, "majestic even in ruin," but yet only dead.

I believe, therefore, it is the duty of every scientific man, who is also a lover of his fellow-men, to attempt to restore again the faith which he himself, perhaps, has helped to destroy; to wrest again, if possible, from the hands of infidelity, the weapons which perhaps he himself has furnished; to build again the foundations of faith upon a more solid, enduring, and rational basis.

Now, I have long come to the conclusion that much of the difficulty and distress which many feel in regard to the discordance between science and religious belief is wholly factitious, having its origin, not in the nature of the subject itself, but in the irrelevant matter, the rubbish which has been gathered about the subject by bigotry on the one side, by conceit and vanity on the other, and by misconceptions on both sides. We are so blinded by the smoke and the dust of the conflict that the true question is scarcely seen at all. Remove the rubbish, clear away the smoke so that we can see the question in its naked simplicity, and nearly the whole difficulty disappears. This has already taken place in the case of the questions raised by astronomy.

It will gradually come about also in the disputes raised by geology. I wish, if possible, to help this process. Let me, then, take up some of these difficulties in the way of a true apprehension of the subject, and attempt to remove them:

1. The first difficulty of which I shall speak, is a misconception, on the part of many religious persons, of the very nature of inductive evidence. A distinguished theologian, one of the most distinguished ever produced by this country, once said to me: "My mind is open to conviction, I am willing to believe the conculsions of geology if I am convinced by proof. Prove to me now this antiquity of the earth, this introduction of death ages upon ages before the advent of man; prove to me even the great antiquity of man and I will not refuse to believe. But my mind is so constituted that I cannot assent unless I am convinced by proof."

Now, this seems to most persons a most reasonable demand. Yes, in this age of Parliaments, of Congresses, and legislative assemblies, of court-rooms, of political clubs, and debating societies, in this forensic and polemic age, when even the most important truths may be discovered and settled in a half-hour's skillful argument, it may, indeed, seem very reasonable. If the question were a question of victory instead of a question of truth, to be determined by skillful argument instead of by laborious, patient research, if it were a question of intellectual vrestling, with judges of wrestling to determine upon whom the victory falls, it certainly would be a very reasonable demand. But to those who know that truth is not to be determined by debate, but by long-continued, patient labor, the demand indicates an

entire misconception, both of the nature of the evidence upon which scientific conclusions rest—i. e., the nature of inductive evidence—and of the very grounds of a rational faith in matters of science.

What is the evidence in favor of any fundamental truth in science? It is no less than the whole science itself. What is the evidence for the rotation of the earth on its axis, or the revolution of the earth about the sun, instead of the sun about the earth? It is little less than the whole science of astronomy. All the observations ever made throughout the whole history of this science, and all the reasonings by which these observations were bound together into one consistent whole, all point to this one conclusion. The evidence derived from any single fact is small, but the effect of the whole is overwhelming. But can all this be placed before the . mind of an objector in the course of a debate? evidence cannot be appreciated, except in a very general way, even after a thorough elementary course of instruction in astronomy. It can be appreciated in its overwhelming fullness only by him who devotes his life to the investigation of the subject. The same is true of the fundamental truths of geology. Every fact ever observed and recorded in the whole history of this science, all converge and point to an inconceivable antiquity of the earth and of the organic kingdom. evidence, if once appreciated, is irresistible, but it cannot be presented in a debate. Those who doubt and cannot be convinced except by the whole evidence, must seek the evidence for themselves. If they seek earnestly and honestly, the result is not doubtful—it must be complete conviction. But the mass of men,

even most intelligent men, cannot do this. Must they, then, refuse to believe because they cannot get the evidence? By no means. This brings me to another point, viz., the rational basis of faith in matters of science.

How many persons, think you, believe that the earth turns on its axis because they appreciate the evidence upon which that conclusion rests? Certainly, not one in a hundred thousand. Yet all men believe it. Why? Simply on the authority of scientific unanimity. Whenever all men in all countries, who have studied any subject profoundly, have the same belief, the authority of such scientific unanimity is overwhelming. It must and ought to be so. The world could not get on without such faith in authority. Such unanimity is a thoroughly rational ground of belief.

We talk much, in this age and country, of the right of free inquiry. We often say, " Every man has a right to his own opinion." But, in a question of exact science, what becomes of the right to one's own opinion? Suppose a man should say, "I have a right to my own opinion, and I believe that the earth does not rotate on its axis, but the sun goes around the earth." His opinion would only be received with ridicule, and he would be told that, if this be his own opinion, he had better put it in his pocket and keep it there like his other individual property, for nobody wants it or cares for it. No man has a right to an opinion when truth is within his reach. Opinion is subjective—determined by temperament, education, and prejudice, and, therefore, is always more or less delusive—truth is objective reality. Opinion is humantruth is Divine. Opinion is individual property—truth, like all great Divine blessings, is the heritage of all.

Thus, you perceive that in science the right to one's own opinion has no place; and the right of free inquiry must be exchanged for the duty of scientific research: But, in the higher and more complex departments of thought and activity, in those departments in which our passions and emotions are involved, in the region of political philosophy, and in moral and religious philosophy, we assert the right of free inquiry, the right to have our own opinion. But, why? Because those who study these subjects most profoundly do not agree with one another; and, when the doctors disagree, then the people assume the right to think for themselves. But, if there were an absolute unanimity of belief on these subjects in all the best minds, there is not the least doubt that the authority of such unanimity would and ought to be complete, and free inquiry and individual opinion would no longer be thought of as a right.

Observe, then, that the region of doubt is the realm of free inquiry and individual opinion. It is the realm of skillful argument and dexterous dispute. It is the region, therefore, that acute casuistry loves, because there it gains its triumphs. But earnest science hates it, for science strives ever to change doubt into certainty, to change opinion into truth.

Now, in regard to the questions so often mentioned, viz., the inconceivable antiquity of the earth and of the organic kingdom, and the creation of the cosmos by evolution, scientific unanimity is already complete, and

therefore scientific authority ought also to be complete. No man who has not studied the subject profoundly has A position of unbelief is in any right to disbelieve. violation of the laws of reason—is irrational. doubtedly, therefore, Scripture ought, now, to be interpreted in accordance with these facts. Nevertheless, it is certain that, during the period of change of interpretation, Christian faith is always unsettled. The transition period is always a period of pain. Evidently, therefore, the change ought not to be made until scientific unanimity is complete. In the questions mentioned above, this point has been reached, and therefore the necessary changes of interpretation ought to be not only made, but freely given in the Church, the Sundayschool, and the nursery. The question of antiquity of our race, far greater than had been previously supposed, may be also considered as nearly or quite settled. As to other points of difference, in questions not yet settled in science, our religious faith and our usual interpretations should not be disturbed.

2. The next difficulty which I take up is, a mistake on both sides as to the nature and object of so-called schemes of reconciliation. What is the history of these schemes? There is an apparent discrepancy between the teachings of Nature and the teachings of Scripture, which pains the religious world. Some ingenious person, it may be a religious scientific man, or it may be a liberal-minded theologian, devises a scheme of interpretation, which satisfies the demands of science, and at the same time satisfies the minds of religious persons. Immediately this interpretation is seized upon as the only true interpretation—as the Divine thought itself. In

the mean time science advances, new facts are discovered, and the proposed interpretation is no longer acceptable to science; the conflict is reopened, and religious faith again receives a shock. Again, some ingenious person comes forward with a new interpretation, which seems to satisfy the demands of both parties. Not profiting by the previous experience, again everybody says: "Now we have the true and final interpretation; now we have the Divine thought itself." In the mean time science again advances, and new facts are again discovered, and again the compromise is destroyed; the conflict is reopened, and religious faith suffers a new shock. This has happened repeatedly in the history of science and the history of religion. Thus religion is placed in the humiliating position of retreating step by step before the steady advances of science, and the faith of many suffers irreparable injury.

Now, this ought not so to be. It is the result of a misapprehension of what is or ought to be the object of such schemes of reconciliation. These ought not to be regarded as a final or perfect interpretation of either book; certainly not of Scripture. They ought to be intended only to show that there is no necessary and irreconcilable antagonism at all. For instance: Suppose we have an apparent discrepancy between the two books. The skeptic, on the one side, says: "The discrepancy is irreconcilable—they cannot both be true; I will, therefore, hold to Nature, and reject the Scriptures." The theologian, on the other side, says: "Yes, they are, indeed, irreconcilable, and therefore I will hold to the Scriptures, and reject your science." At this juncture comes the religious scientist or the

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liberal theologian, and says: "You are both wrong, gentlemen; the two books are not irreconcilable; for, see! I can reconcile them by this interpretation. I don't say this is the true interpretation; but it is a possible interpretation. Or I may reconcile them by this other interpretation. I don't say that this is the true interpretation, but only that it is a possible interpretation." Thus there may be many interpretations, either of which may reconcile the discordance, and yet none of them be the true and final one; but they show that the two books are not fatally irreconcilable.

But, unfortunately, instead of taking this view, most persons persist in pinning their faith to schemes of reconciliation. We will grapple the anchor of faith to the outer form, instead of taking hold of that which is within the veil. We will clothe Divine truth in our human clothing, and then confound our clothing with the spiritual reality; and, therefore, when the clothing is cast off, we think the Divine Spirit is gone too. Alas! how much of our pain and sorrow in this world is the result of this difficulty of separating substance from form! Is it not this which barbs for us the arrow of death, which pierces our dear friends? We associate the spirit that we love with the form, the face, and features that we love, until we cannot conceive of the existence of the one without the other; and then, when the form is gone we weep, because it seems to us that the spirit is forever dead also. Thus it is we will formulate Divine truth, and then mistake our formula for the Divine truth itself. Our faith petrifies into a formula, and when the formula is broken, alas! our faith dies also.

3. This brings me very naturally to the next difficulty. It is, in fact, already expressed in the last sentences above. It is the confounding of our formulated systems of belief with Divine truth, the human form with the Divine reality, our interpretation with Divine revelation, science with Nature, theology with Scripture. Let me illustrate by examples. I have frequently heard it said by religious men: "Your science is human, changing, fallible-you admit it; but the Scriptures I believe to be Divine, and therefore infallible. If there is discordance, I therefore reject your science." This language indicates the confusion of which I speak. It is difficult, almost impossible, to avoid falling inadvertently into this misconception; I may do so myself in the course of these lectures. Some of the best writers are guilty of this confusion of thought. I remember seeing some years ago, in one of the British reviews, an excellent article, entitled "The Bible vs. Science," and another, entitled "Genesis and Geology." These titles indicate the confusion spoken of. This mode of thought, and comparisons like the above, are so common, that perhaps some of you will be surprised that I take exception to them. Let me explain:

The Scriptures we believe to be Divine. Science? we acknowledge to be human? We cannot compare Divine things with human things, and therefore we ought not to compare science with Scripture. But is there not on the side of science, also, something Divine, with which we may without irreverence compare the Scriptures? Surely there is: it is Nature. And is there not on the other side, also, something

human with which to compare science? Surely there is: it is our theology, our system of religious belief. If we must compare, therefore, let us compare Divine things with Divine things, and human things with human things, the Scriptures with Nature, our interpretations of Scripture, theology, with our interpretations of Nature, science. In this aspect of the case Science does not fear the result.

4. Again very closely connected with this difficulty is another, which is the last I shall speak of this evening. It is the non-recognition of the sacredness and the Divine authority of the teachings of Nature. Many religious persons seem to say: "The Scriptures are sacred and authoritative. We must believe, our highest concerns are closely connected with belief or disbelief. But Nature is profane; belief or disbelief of her truths is indifferent to our highest welfare." Nature profane! There is nothing beneath the heavens profane, but vain, presumptuous man, who dares to call that profane which God has pronounced good. Both, therefore, are sacred, though perhaps in different degrees. Let us compare them with one another.

We, all of us, speak of the Bible as a book; but, in the sense in which this is a book, there are but two books—two Divine, original books, viz., the *Bible* and *Nature*. All other books, mere human productions, are, more or less, successful commentaries upon these two original Divine books. We have commentaries of the first degree. We call these original; and, in the human sense of the term, they are so. We have commentaries upon these commentaries, commentaries of the second degree. We have books which are com-

mentaries of the third and of the fourth degree of dilu-There are some weak stomachs, for which these third, fourth, and fifth degrees of dilution of truth are perhaps best; but, if one can bear it, let him, by all means, drink at the original fountains—let him study the two Divine originals. Now, the body of systematic human knowledge derived from the interpretation of the one book is called science; the body of systematic human knowledge derived from interpretation of the other is called theology. Both of these books have the same Author, and are, therefore, equally sacred, equally true, equally authoritative. Both of these books are Divine revelations. I have attempted, throughout this course, to show you that Nature is a Divine revelation—that the laws of Nature are but the modes of operation of the Divine intelligence, that the forces of Nature are but the omnipresent energizing Divine will, that even the objects of Nature are but the embodiments of Divine thoughts.

Both of these books, then, are revelations, but observe the difference in the mode of revelation, the difference in the writing. The one is written in hieroglyphic characters, which it is the duty of science to decipher; in symbolic characters, which have a necessary and an eternal significance; in other words, it is written in the native handwriting of Deity himself. The other is written in arbitrary, conventional, human letters and human words, and thus brought down more to our human weakness. Both are revelations, but observe, again, the difference in their scope and object. The one is a revelation especially of the intellectual character of Deity, and only imperfectly of his moral nature—

the other is a revelation especially of his moral nature his relations to us, and our relations to Him and to one another, and only imperfectly of his intellectual character. The one reveals especially his thoughts, the other especially his will. The general object is the same in both, viz., to elevate and cultivate man; but one is intended to cultivate primarily 'the intellectual nature of man, and only secondarily his moral nature: the other is intended to cultivate primarily his moral nature, and only secondarily, through the moral nature, his intellectual nature. The general object of both is to perfect the Divine image in the human spirit; but the special object of one is primarily to restore that image in the human reason as truth; while the special object of the other is to restore that image in the human heart as perfect love. In a word, the one is the Divine text-book of truth, especially physical truth; the other is the Divine text-book of conduct and of moral truth.

Now, of these two books, Nature is the elder born, and, in some sense, at least, may be considered the more comprehensive and perfect. To the ideal man, with his spiritual senses as acute and perfect as his physical senses, to such a man, whether we regard him as an ideal from which we fell, or an ideal toward which we rise—to the ideal man, I suppose, Nature is a perfect revelation of Deity. But, to imperfect, fallen man, with his moral nature obscured and his spiritual senses dulled, Nature is no longer a clear revelation of the moral nature of Deity. Therefore, it became necessary that another revelation should be given—a revelation more adapted to our imperfect spiritual con-

dition, and revealing more clearly the moral nature of Deity.

I have said that both these books are Divine revelations, both sacred, true, and authoritative. I have said, moreover, that Nature is the elder, and, in some sense, the more comprehensive and perfect. Do not understand me, on that account, to assert that the study of Nature is more important than the study of Scripture. Lest I should be so misunderstood, let me hasten to give you some reasons for believing the contrary.

In the first place, I have already said that Nature cultivates primarily the intellect, while Scripture cultivates primarily the moral nature of man. Now, it is his moral nature which is the distinctive characteristic of man. This it is which constitutes him man; this it is which is the very essence of humanity. Without this, we might regard him only as an intelligent animal. So far as the intellect is concerned, it is not very difficult to conceive a gradual evolution of man from the lower animals. It is the moral nature which is distinctively human, and therefore highest. The cultivation of this higher nature must be of the greatest importance.

Again: The intellect cannot be said to be fallen, or to be depraved. Pure intellect has no character to fall. Character, in the proper sense, is connected with our moral, not our intellectual nature. It seems to me that, in pure intellect, men differ from each other, and even from Deity himself (I say it with reverence), only in degree, not in kind. It seems to me that, in pure intellect, the image of God is still perfect. Thus, therefore, in all subjects in which only pure intellect is involved, in questions of pure mathematics or mechan-

ics, one person may see, and another not see; one person may see more, and another less; but, whatever is seen, is seen alike by all. But when we come to questions in which the moral nature is concerned, in which the prejudices, passions, feelings are involved, then we find that men differ from one another not only in degree, but also in kind, and all differ sadly from the Divine original. Not only one sees more than another. but one sees differently from another. image in all is not only defaced, but variously defaced. In mathematics and mechanics, the intellectual vision is clear and undisturbed; but, even in the higher departments of science, and much more in questions of politics, morals, and religion, we look through the variously-colored medium of our passions, our prejudices, our emotions, our temperaments. To illustrate: In looking at a mathematical or mechanical question. we may be said to look with our naked eyes through a clear medium. One person may see more than another. because he has stronger eyesight; but, whatever is seen at all, is seen alike by all. But, as soon as we come to questions in morals, in politics, and especially in religion, then every man at once puts on his own pair of pocket spectacles. These are stained, of various colors and various depths of tint; they refract also in various ways, sometimes enlarging, sometimes diminishing, sometimes sadly distorting the object. Now, therefore, we see, not only one man more sharply than another, but we see things entirely differently one from another, having different forms, sizes, colors; and, alas! the spectacles of some are so deeply stained that they scarcely see at all.

Do you not observe, then, that in all these subjects, subjects which are most closely connected with our highest interests, the perception of truth depends, not so much on the vigor and clearness of the intellect as it does upon the purity of the heart. The trueness of our perception depends, not so much upon the strength and keenness of eyesight as upon the clearness of the medium through which we look. Evidently, therefore, for the purpose of seeing truth in these departments, the most important thing is not strengthening the eyesight, but clearing the medium-is not cultivating the intellect, but purifying the heart. these subjects we literally understand with the heart. "Blessed are the pure in heart, for they shall see God," i. e., shall see spiritual truth; for it is only in that sense that we see God.

Again: The intellect is native to this earthly clime; it is indigenous here. Like our native forest-trees, therefore, it grows naturally, and without culture. True, it may grow more vigorously by culture; but it is not wholly dependent on culture. The necessities of our material existence, the contact with the external world and with our fellow-men, and the use of the senses, produce, without voluntary effort, a large amount of intellectual culture. The larger portion of our intellectual culture comes in this involuntary way. There have been many great intellects that never had any other. But our moral and religious nature is a sickly exotic, transplanted from a distant, heavenly clime. It must be nourished with heavenly food; it must be tenderly nurtured, and trained into forms of beauty; it must be taught to stretch out its tendrils

and take hold of and cling to the Rock of Ages; it must be taught to expand its leaves to receive light and warmth from the Sun of Righteousness. Otherwise it will take on monstrous shapes and ghastly hue; it will seek to hide itself from the light, and bury itself beneath the earth.

Again: The necessary condition of all our intellectual culture, and all that we call civilization, is the existence of social organization; society, government, laws, Divine government and human government, Divine laws and human laws. Now, the very existence of such organizations, of such governments, whether Divine or human, is conditioned upon our moral rather than our intellectual nature; and their successful operation is dependent upon the cultivation of our moral rather than our intellectual nature. The intellect is individual and separative; the moral nature is combining and social. The universe of spiritual beings is bound together wholly by the universal moral energy, love.

Thus, then, I have shown that the study of the Scriptures is for many reasons of transcendent importance. But the study of Nature is by no means indifferent to the cultivation of our higher spiritual nature. He who ignores or despises the one or the other book dishonors the Author of both, and starves his own soul. They are both necessary to the highest development of our human nature in strength and in beauty.

Both these books, therefore, are divine and sacred, but in different degrees. Nature is a grand and holy temple, built by the Divine Architect for his own glory and the culture of man. We walk upon this earth, its

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floor, and beneath its glorious overarching dome. As we walk, let us not forget to look upward and worship. Within this holy there is an inner sanctuary—a most holy, viz., the Scriptures. Within this again is revealed Christ, the visible incarnate Deity and the Atonement; the glorious Shekinah and the Mercy-Seat.

LECTURE XV.

THE GENERAL RELATION OF THEOLOGY TO SCIENCE,— (CONTINUED.)

My Christian Friends: You will remember that, in my last lecture, I stated that the antagonism between the teachings of Nature and the teachings of Scripture is far more apparent than real; that it arises in a great measure from the misconceptions and misunderstandings which exist on both sides, from the smoke and dust of angry conflict; that if we remove these misconceptions, clear away this dust and smoke; that if we rise to a higher and more philosophical view, and see the subject clearly in its simple nakedness, nearly the whole antagonism disappears. I occupied the remainder of my last lecture in stating and removing several of these misconceptions. There are still two others which, without further preface, I proceed to take up:

5. The first one which I take up this evening, the fifth in the series, is, I believe, one of the most common and most prolific of evil. It may be stated, in the words of an objector, as follows: "Admitting that theology, like science, is only the human interpretation of a Divine record, nevertheless there is this essential

The reasoning of those who take this view seems plausible. They say: "The object of science and the

study of Nature is only to increase our material comforts, to satisfy the wants of our material and temporal life. Interests such as these may well await the gradual advance of science. But the study of the other book is connected with our spiritual wants, and with our eternal life; and wants so urgent and interests so vast as these cannot await the gradual advance of knowledge. Hence, it is necessary that this book should be so written that the interpretation may be at once complete and perfect." Such is the reasoning.

Now, it seems to me that, in this respect also, the two books are exactly similar. As, lying upon the surface of Nature, and immediately perceivable by the senses, there is revealed—so plainly revealed that "the wayfaring man, though a fool, may not err therein "sufficient for mere material life, sufficient to keep us from falling over precipices and into fires, sufficient for mere animal subsistence; so also, lying on the very surface of the other book, in the literal, obvious meaning of its words, there is revealed—so plainly revealed that "he who runs may read"—sufficient for spiritual life or salvation. But, as, in the former case, behind this mere surface knowledge, revealed directly through the senses and readable by all, because necessary to material life, there is an infinite treasury of knowledge, not for the wayfaring man and the fool, but for the diligent and reverent student of Nature; not for mere material existence, but for gradually increasing happiness and comfort, and civilization and intellectual culture; so also, in the other, besides the knowledge which lies upon the surface, and in the literal meaning, easily obtained because necessary for spiritual life, there is an

I repeat, therefore, that the two books are in this respect similar. The knowledge derived from the interpretation of both is progressive. If both books are Divine and infinite, and the interpretation in each case is human and finite, the human knowledge derived from interpretation of each must of necessity be progressive.

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Science and theology, therefore, are both progressive; but they are progressive in somewhat different ways. The one, science, is progressive mainly through the exercise of human reason; the other is progressive mainly through the purification, by Divine illumination, of the human heart. To use the illustration of my last lecture: the one increases by the increasing strength of the intellectual eyesight; the other increases by the increasing clearness of the medium through which we There is a Divine and a human element in all our progress, even our progress in science. Yes, purity of heart is necessary for the clearest perception, even of the truths of Nature. There is a Divine and a human factor in all our knowledge; but in science the human factor predominates, while in theology the Divine factor predominates. Science like a beautiful temple rises before us under the busy hands of thousands of eager, joyous workmen. Every stone is shaped and fitted to its proper place, and has the name of him who shaped it engraved upon its face. Thus

we mark and measure, from day to day, the progress made, and to whom we owe it. Every column, pinnacle and spire, as it rises to its place, is welcomed with shouts which rend the air. Thus, steadily and grandly the temple of science rises before us; the greatest monument of human genius, the only temple ever built by man, worthy to be dedicated to the great Author of Nature. But the increase of spiritual and moral truth from age to age, like the work of God, is silent; noise and shouting and clamor are unbecoming Like the temple of Solomon, the so holy a work. sound of the chisel and the hammer is not heard. is not built, it silently grows; it is not a temple, it is rather a tree—a tree whose vital principle is the Spirit of God, whose fruits are love and joy and peace, and whose leaves are for the healing of the nations. springs up, it grows, and shall continue to grow until its boughs shall overshadow the whole earth, and the weary nations shall lie down and rest beneath its shade; but we, children of a day, we enjoy its blessings, yet mark not its growth.

Admit then, only, the sacredness and the equal authority of those two books, admit also the inexhaustibleness of both, and the finiteness, and therefore the progressive nature, of human knowledge in both, and it seems to me that nearly all the antagonism disappears. But, alas! instead of this liberal and humble spirit, we find only conceit and vanity on the one side, and pride of opinion and prejudice on the other: the eager grasping after the new, only because it is new, which marks the sciolist, or else the obstinate clinging to the old, only because it is old, which marks the

bigot; instead of that simple, pure, open receptiveness of mind, willingly embracing truth, whencesoever it may come, and however much it may run athwart our previous opinions, which marks the lover of truth. Let me illustrate the unreasonableness of the position of such men on both sides: There are two streams of infinite length. Commencing from little fountains and rills, far separated from each other, they gradually form two great rivers, which we have the best general reasons for believing converge and flow together, and empty into the same infinite ocean of truth. We have as yet explored but a little way in the extreme portions of these two streams; and, because, in their apparently devious course, and judging by our poor human compasses, they seem just now to be diverging a little from one another, we immediately conclude that they never can converge again, that they never can meet, that they do not flow into the same ocean at all! Verily, such fantastic exhibitions of human pride and arrogance, "in the face of high Heaven, are enough to make the angels weep."

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Let the scientist, then, beware, lest, in his eager grasping after the new, he mistake his unverified crudities for eternal truth. Let the theologian also beware, lest haply, in his blind and mistaken zeal, he be found

¹ The former class call themselves rationalists and skeptics, as if they alone used a rational caution in matters of belief. They are accustomed to speak of the other class, and of religious men generally, as irrational and credulous. The truth is, both classes are equally credulous and equally skeptical, and therefore both equally removed from a true rational spirit. The bigot is credulous of old things and skeptical of new things; the sciolist, or so-called skeptic, s credulous of new things and skeptical of old things.

fighting against God himself. Let him remember that the Divine Master himself was rejected by his own people upon (what they supposed) scriptural grounds.

6. The next and last misconception which I will mention is, mistaking the Scripture for a scientific treatise, and therefore attributing to it, and exacting from it, scientific accuracy of language and statement. This, also, is a very common misconception, and underlies, perhaps unconsciously to the objector, many of the objections to the Divine authority of Scripture. result of this misconception is, that whenever the language of Scripture is found not to be a scientific statement, discredit is thrown upon its authority. for example, the Scripture says, "Steadfast as the earth which cannot be moved;" and yet we know that the earth is spinning upon its axis, and rushing through space with enormous velocity. Again, the Scripture says, "The sun ariseth, and the sun goeth down, and hasteth to his place where he arose;" and yet weknow that it is the earth that moves around the sun, and not the sun that moves around the earth. Again, the Scripture says that the sun was created on the fourth day-after light, after the earth, after planets; and yet we know that all our light comes from the sun, the earth was born of the sun, and plants are entirely dependent upon and derive their life-force from the sun. The statements of Scripture, therefore, it is said, are plainly contrary to the teachings of Nature, and thus discredit is thrown upon the Scriptures.

Verily, this seems to me the flimsiest of all objections. For, observe, the language of Scripture is never intended to be a scientific statement. The language

of Scripture in regard to external Nature is always the language of the senses, the language of appearance. Is it strange that it should be so? Is not this the language of poetry? Is it not the language of oratory, the language of the imagination, the language of the heart, the language of the people? In a word, is it not the language of every thing except only science? Do we not all of us, every day of our lives, use this language? Do we not also speak of the fixedness of the earth, of the rising and setting of the sun? yet no one accuses us of falsity. Even Science herself, when she descends from her throne, when she lays down her sceptre, and doffs her robes, must use the same sense-language. Even scientific language itself, even the language of Science when she dons her queenly robes, is only in a relative sense accurate. no such thing as absolute accuracy, except with God. All our language and all our knowledge is only relatively true. When we take our stand upon the earth, and speak of terrestrial things, then the earth is fixed. But as soon as we transfer our stand-point to the sun, then the sun becomes fixed, and the earth and planets move. But, is the sun then absolutely fixed? No; as soon as we transfer our stand-point farther, our sun with its system of planets, yea, all the starry bodies which form our galaxy, are drifting with enormous velocity through space. Where, then, shall we find absolute fixedness? Nowhere except at the throne of God himself.

Suppose it had been otherwise: suppose, for a moment, that the Scriptures had used scientific language. Suppose, instead of saying, "I set my bow in

the clouds," it had spoken of reflection and refraction and dispersion of light. This would have involved the necessity of a Divine treatise on optics; and this, again, another on mathematics; and, in the mean time, the moral truths, the glorious hopes, contained in this beautiful passage, would have been entirely lost. Suppose, instead of saying, "Steadfast as the earth which cannot be moved," it had said steadfast as the sun: the explanation of language so contrary to the appearance of things would have necessitated a Divine treatise on astronomy, and this, again, another on mathematics; and in the mean time the moral effect of this beautiful illustration of the unchangeableness of Deity would have been lost.

The Bible, therefore, is not, and cannot be, if it be Divine, a scientific book. Any attempt to teach science would show its human origin. The two Divine books have entirely different functions: they are intended to teach different things; one to teach physical truth, the other to teach moral and spiritual truth. ures were never intended to teach one single physical truth. We cannot insist too strongly upon this. There is another Divine book in which these are plainly, and in all their detail, revealed. If we want physical truth, there is the place to find it. The Scriptures, I repeat, do not teach physical truth; they only allude to physical phenomena, because it is impossible to avoid it; because it is necessary to clothe moral and spiritual truth in this garb in order to impress the sensuous nature of man.

This remarkable reticence in regard to explanation of external phenomena of Nature is the distinguishing

characteristic of the Scriptures. Nothing of the kind is observed in other pretended sacred books. rock upon which all such pretended sacred books split is the physical science which they pretend to teach. They pledge their divine authority to the truth of their physics, and are therefore overthrown by the advance of science. Now, if Moses were an impostor, or even if he were a great philosopher, mistaking his own imaginings for inspiration of Deity, is it possible that his opinions, or his imaginings concerning the phenomena of the physical universe, should not find place in his writings? Is it possible that he should not have given a complete theory of the physical universe? · It seems Such reticence is sublime, it is to me impossible. superhuman, it is Divine.

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Now, I wish you to observe, then—1. Natural phenomena must be alluded to in the Scripture; it is impossible to avoid it; all the grand metaphors which convey moral truth are taken from external phenomena. Observe, again—2. It is impossible for us to avoid interpreting such allusion to physical phenomena, by the scientific knowledge of the age. But, alas!—3. We then associate in our minds this interpretation with the Scripture until we confound the one with the Thus, for instance, the Scripture speaks of the sun rising and setting; in so doing, only using the common, popular language of appearance. was interpreted by the early Church to mean, and therefore to assert, the motion of the sun around the earth. Then, next, the science of these early times becomes indissolubly connected in the minds of Christians with the words of Scripture, and they thus unconsciously pledged Scripture to the truth of their science, and, when their science is proved to be false, the Scriptures seem to be discredited. So, also with the language referring to the creative days. In the absence of all knowledge of the geological history of the earth, it was almost impossible to avoid giving the ordinary significance to the word "days;" but, unfortunately, by constant association of our interpretation with these words, the Scriptures are gradually pledged to the truth of our interpretation; and when by the advance of science our interpretation is proved to be false, then Scripture seems again to be discredited.

Now, as I have already said, there always will be apparent conflicts between the teachings of Nature and Scripture so long as our knowledge of both is imperfect. But, whenever there is such a collision, there is, it seems to me, one very simple, practical, rational rule, which covers nearly if not quite every case. this: If the question be a question in physical science, if the subject be one which is clearly revealed in Nature, then, without hesitation, I would follow the teachings of Nature, even though some scriptural allusions to natural phenomena by our traditional interpretation may seem to teach differently. And I believe I honor the Author of both books by so doing. But if the question be a question of moral and spiritual truth, and the teachings of Scripture are clear and unmistakable, then I follow the Divine text-book of moral and spiritual truth, in spite of some dim intimations in external Nature and in my own intuitions which seem to point to a different conclusion. think I honor the Author of both books by so doing. Is not this reason? Is it not common-sense?

Now, I believe this rule covers every question in dispute, and therefore removes every serious difficulty. There is only one possible class of questions in which there can be any real difficulty, viz., those questions in which both physics and morals are involved; those questions in which physical facts and physical statements seem to involve also moral and spiritual truth. I am not sure there are any such questions in dispute. Some persons think that the unity or diversity of the human race is such a question; some think the question of origin of species is such a question. I do not think so. But, if these questions trouble any one, let him remember that they are still in the region of doubt, that they are still under scientific discussion, that they lack yet that scientific unanimity which would render it necessary to disturb our usual interpretation of Scripture.

A few words upon the first chapter of Genesis and the Mosaic cosmogony, and I am done. It might be expected by many that, after speaking of schemes of reconciliation, I should give mine also. My Christian friends, these schemes of reconciliation become daily more and more distasteful to me. I have used them in times past; but, now, the deliberate construction of such schemes seems to me almost like trifling with the words of Scripture and the teachings of Nature. They seem to me almost irreverent, and quite foreign to the true, humble, liberal spirit of Christianity; they are so evidently artificial, so evidently mere ingenious human devices. It seems to me that, if we will only regard the two books in the philosophic spirit which I have attempted to describe, and then simply wait and possess

our souls in patience, the questions in dispute will soon adjust themselves, as other similar questions have already done.

Upon the subject of the first chapter of Genesis, I will, therefore, make only a few very general remarks. The first one is this: By far the grandest interpretation of this chapter is that which makes the creative days great periods of time. It is not only, however, the grandest, but it is also by far the most accordant both with the teachings of Nature and the teachings of Scripture, and therefore the most rational. accordant with the teachings of Nature is admitted by all; but many will perhaps doubt its accordance with the general teachings of Scripture-many regard it as a construction forced upon us by Nature. I cannot think For, observe, the word "day" is often used, both in Scripture and in common language, to mean an indefinite period of time. Observe, second, that in the poetry of the Scriptures it is nearly always used in this indefinite sense. Observe, third, that in prophecy it is always used in that sense. In other words, in subjects which lie within the limits of our human experience, the word "day" is used in Scripture in its usual signification of a period of twenty-four hours; but, in every case in which the subject is one which transcends human experience, it is used as an indefinite period of time. Now, is there any thing in the Scriptures or in all literature which is more thoroughly and grandly poetic than the first chapter of Genesis? Is there any portion of Scripture which speaks of things so completely transcending not only actual but all possible human experience? Evidently, therefore, the

word "day" not only ought, but must be, used in the sense of an indefinite period of time.

But some will say that the exact sense in which the word is used is clearly defined in the fourth commandment, where we are told to work six days, and rest one day in imitation of Him, because He created six days and rested one. But it seems to me this is a very superficial view of the meaning of this passage, and a very narrow and sensuous view of human imitation of Deity. Man is, indeed, made in the image of God; all man's thoughts and all his works are worthless, except in so far as they are images or imitations of the Divine; every human thought is true only in proportion as it is like the Divine thought; every human work is good only in proportion as it is like the Divine work. Yes, like, but not on the same scale like, but on a small human scale. Suppose it were required of a man to make a globe. He makes it round like the real globe, the Divine work; he makes the outlines of continents and seas, of bays and rivers and mountains, precisely as upon the real globe. likeness is complete, the work is pronounced good. is like the Divine work, but not on the same scale—it is like, but on a small human scale. So must it be in It is impossible that the Divine work should be other than on a Divine scale; it is impossible that we should imitate Him except on a small finite human scale. Thus, then, as He worked six Divine days and rested one Divine day; so ought we in humble imitation of Him, but on a lower human finite scale, to work six human days and rest one human day. If we do so, we do well—our work is good.

The next remark I make is this: Taking this view of the nature of the creative days, there is an undoubted and really wonderful general accordance between the record of Scripture and the record of Nature. The order of creation revealed in Scripture is the order of the evolution of the material universe and of the organic kingdom revealed in Nature. Is this genius? If it be genius, it is a genius which has anticipated the latest results of science.

The last remark I make is this: Such a general accordance is all that we ought to expect. The Scriptures were never intended to teach science; the first chapter of Genesis was never intended to teach geology, it was not intended to teach us the history of the earth; it was not intended to teach any thing which is clearly recorded in Nature. If we wish to learn the history of the earth, there is already a Divine book, upon the leaves of which this history is recorded in all its detail, by the finger of God. Let us study it.

But you will naturally ask, "Why, then, was the subject touched upon at all by Scripture?" I answer, because of the moral truths contained in this grand sketch—moral truths which lie at the very foundation of all true religion, and which strike directly at the root of certain prevailing forms of error in philosophy, and in popular religion. First, it asserts that God, in the beginning, created cosmical matter—the world-stuff out of which the universe was afterward formed, in opposition to that philosophical error, pantheism, which identifies Deity with matter; which makes matter eternal, and God only an impersonal, abstract principle, pervading matter. Again, it teaches that God is the

former of the cosmos—that, out of the world-stuff or cosmical matter created in the beginning, He gradually in the process of time made all the forms which exist in the universe—that He is the ordainer of the laws of the universe, of the order and beauty of the cosmos; in opposition to that other form of error, materialism, which teaches that all this is done by forces and laws residing in matter itself. Again, it teaches that God was the former of the universe according to an unchangeable plan, carried out through all time, and culminating in man; in opposition to the ordinary heathen ideas of the capriciousness and fickleness of the gods.

But, I repeat, this was not intended as a history of the earth, but only as a sublime introduction to the history of man—man, his origin, his nature, and the scheme for his redemption. It is but a grand choral song, touching lightly the chief points of previous history, in order to bring the audience up to the point of view necessary to appreciate the moral and spiritual significance of the great drama of human history. How grand, how noble, how fitting an introduction!

LECTURE XVI.

MAN: HIS PLACE IN NATURE.

MY CHRISTIAN FRIENDS: The subject of my lecture this evening is, "Man: his Place in Nature."

As already often stated, there are but two Divine books from the study of which all our human knowledge is derived, viz., the Scriptures and Nature. Now, according to both of these books, the introduction of man is the last act of creation. According to both, man is the highest and noblest work; there was a gradual progress of Nature which culminated in man as its crown. You have probably heard much in these later days of the antiquity of man; but it is of no importance whether the human race be six thousand, or ten thousand, or twenty thousand, or fifty thousand years old; all, I think, will admit that he is the highest work of creation, the last and highest term of evolution.

According to both books, again, there has been a gradual and elaborate preparation of the earth as the abode of man. This is most clearly shown in the geological history of the earth, because here we have the history of creation given in all its details. I wish I could stop to show you that the whole history of the

earth is a history of its preparation for man; but I have much to say to-night; I can only select a few striking examples:

This air, which we breathe so freely, was in the beginning so loaded with poisonous carbonic acid as to be unfit for the sustenance of organisms. time, therefore, the earth was uninhabited. Gradually, by a subtle chemical process, immense quantities of this carbonic acid were withdrawn, and united with lime to form immense beds of limestone, which still form much of the strata of the earth. The atmosphere was now suitable for the growth of vegetation and the life of lower water-breathing animals, but not for the higher air-breathing animals. Therefore, when all was prepared for the introduction of these higher animals, immense quantities of carbonic acid were again silently withdrawn from the air by the luxuriant vegetation of the coal period, the carbon being buried in the earth as beds of coal, and the oxygen returned to the air. Again, during the Secondary period, and again during the Tertiary period, the same process was repeated: carbonic acid withdrawn from the air, the carbon laid up as coal, and the oxygen returned to the air.

As, however, these are not scientific lectures, we are not now discussing the physical cause of this withdrawal—the process by which it was effected; but we are contemplating the final cause, or the intelligent end or object of the withdrawal. There are some persons who seem to think that, as soon as we understand the physical cause or the process by which an event is accomplished, we thereby place it beyond the category of intelligent design—that physical causes displace final causes. My

friends, we are placed here to study the modes of operation of the Divine mind, the processes by which He accomplishes results; but this can never interfere with our recognition of intelligent design. It is the domain of science to study physical causes; it is the domain of religion to contemplate final causes.

Now, the immediate end or object of the withdrawal of carbonic acid from the air and replacing it with oxygen, was evidently the preparation of the earth for higher and higher animals; but there was another and more remote object which had reference to the coming of man. In the carbon, thus silently withdrawn from the air and laid up in the earth, was buried a mechanical energy which, after the sleep of millions of years, is even now awaking as the great agent of human civilization.

Again: Iron, the second great civilizer of maniron was originally universally diffused as an ingredient of rocks and soils, and therefore unavailable and useless for human purposes. During the whole geological history of the earth, by a subtle process which is now well understood, this iron was leached out and accumulated in great beds suitable for the uses of man. Metallic ores were, doubtless, similarly distributed in quantities so small as to be undetectable. By a slow chemical process, yet imperfectly understood, these substances have been gradually leached out of the strata and accumulated in veins, and have thus become available for the uses of man.

Again: Useful animals and plants—cultivated fruits—cereal grains—domestic animals—were among the last species introduced before the coming of man.

And not only the uses, but the beauty of created things, gradually increased with the progress of time. The gorgeous plumage of birds, the brilliant hues of insects, the songs of birds, the delicate tints and fragrance of flowers, all have been increasing. The same is true of the inorganic kingdom. By physical agencies which are well understood, the surface of our earth has been sculptured into higher and still higher forms of beauty. Indeed, currents of air and water, sunshine and shower, blue sky and snowy clouds, mountain and valley, crag and cliff, all that gives beauty and variety to this our beloved earth, has been steadily increasing with the lapse of geological time.

If, then, God has been so long preparing the earth for man, how obvious, how imperative is the duty of rational enjoyment—of grateful gladness of heart in the enjoyment of the uses and the beauty of this our prepared abode!

It is certain, then, that geological history finds its term, its completion, its significance, in man. Now, just where geological history ends, Scripture history commences. After a brief introduction, touching the salient points of previous history, and which, as we have already seen, is in striking general accordance with geological history, the Scripture takes up the history of the regeneration of man, the moral and religious culture of man, by the illumination of the Divine Spirit.

But let us return to the creation of man. If we examine the Scripture account of this event, we cannot fail to observe that it is ushered in with peculiar solemnity and deliberation, as if it were an event of peculiar importance and dignity. On the evening of the

sixth day—let me stop a moment to observe that, according to geology also, man was introduced not in the present epoch, but in the evening of the previous epoch—on the evening of the sixth day, when all else was finished and pronounced good, God said, Let us now make man; and let him have dominion over all Nature. Now, why this elaborate preparation of the earth for man? Why this solemn deliberation in the act of creation? What is the peculiar dignity of man as compared with the rest of creation. The answer is contained in the account itself: "And God made man in his own image, and in his own likeness." And again it is said, He "formed man of the dust of the earth, and breathed into his nostrils the breath of life, and man became a living soul."

These, then, are the two characteristics of man according to Scripture, yes, and according also to reason, viz., man is the *image* of God; and man, though formed of dust, though common matter like the rest of Nature, yet is a *living soul*, i. e., an *immortal spirit*. All the works of God are, indeed, in some sense, in his image, but man is so in a peculiar sense. Nature is matter, God is a spirit. Man, though matter like Nature, is also an immortal spirit like God. Nature is the image of God, as every work is the image of the artist, receives the impress of his mind and character; but man is the image of God, as a child is the image of his father. Of all the works of Nature, man alone is the child of God. Of all created things, man alone can call Him his spiritual father.

Now, of these two characteristics of man, one, the image of God, we have attempted all along in these

lectures to impress upon you. I have all along tried to show how profoundly true it is that man is the image of God—that his thoughts are true, his works are good, his life is effective, only in so far as this image is preserved. On this point, therefore, I shall now say nothing more. My object is to take up the second characteristic, viz., man is an immortal spirit.

The immortal spirit of man—what is its relation to the animating principle of lower animals which so closely resembles it? What is its relation to the vital principle of plants and to the physical and chemical forces of Nature? In a word, what is its place in Nature? This, and this only, designates man's true place in Nature. This is the subject of my lecture this evening. You will see at once how difficult and profound a subject it is, if, indeed, it be not wholly insoluble. You will bear with me, then, if all I can do be only to throw out some suggestions which may stimulate thought—scatter some seed-thoughts which may germinate, and perhaps bear fruit hereafter.

All that I have thus far said is only introductory to this my subject. But I find I must give another introduction, in order to prepare your minds for the views I am about to present. I find it necessary to show you the present aspect of this question, and the necessity of a rediscussion in the light of modern science.

That man is an immortal spirit is the doctrine of Scripture: it is more; it is the basis of all religion and morals and virtue, and, indeed, all that ennobles our humanity. It is also a datum, a clear revelation of consciousness. Belief in this is immediate, intuitive, and universal in all minds, unplagued by metaphysical

subtleties. We may learn to disbelieve, we naturally believe. Belief of this rests on precisely the same basis as our belief in external Nature. The one is a direct revelation of sense, the other a direct revelation of consciousness. Both, therefore, are equally certain, far more certain than any thing can be made by proof. These are the foundations, the starting-points of reasoning, not the goal of reasoning. They are the bases, the underlying condition of philosophy, not the subject-matter of philosophy.

There are, then, two bases of philosophy, in fact, two poles of existence—matter and spirit. I say, two poles, for, as magnetism cannot exist as an effective force, except it be divided into two opposite principles, north and south polar magnetism, as electricity cannot exist as an effective force, except as positive and negative electricity—so existence cannot be clearly represented in thought except under the two opposite conditions of matter and spirit—matter the thing perceived, spirit the thing perceiving—matter the revelation, spirit the interpreter—matter the passive, spirit the active principle. Without a belief in spirit, therefore, not only can there be no religion or virtue, but there can be no philosophy or science; there is no longer any significance in man or in Nature.

The existence of spirit, therefore, is certain, in spite of the negative evidence of sense, and in spite of what some think the counter-evidence, though it be in reality only the negative evidence of a material philosophy. But, ah, the power of this material philosophy in the present age! The amazing progress of the sciences of matter, the absorption of the energies of the best

and most progressive minds in the philosophy founded on sense and sensuous experience, have created a current of thought, a tide of philosophy, which sweeps us along with such breathless speed that we have no time to think of the claims of spirit, mind of the age is absorbed in new and startling discoveries in science. Every thing now must be expressed in terms of matter and sense, in the formulæ of a material philosophy. But, alas! spirit eludes sense and immortality transcends experience. Therefore, this philosophy will none of it, cannot believe in it. It may not, indeed, deny the existence of spirit; it only asserts that all positive knowledge is derived through sense and experience; whatever is outside of them cannot be known, and, where there is so much positive knowledge attainable, it is a waste of time to speculate on subjects in which positive knowledge is impossible.

Let me stop a moment here, to show you the power of this current, and the apparent naturalness of the conclusion of the material philosophy.

If we study man in full maturity and health, the manifestations of spirit may be clear enough; but trace him back to the child, to the new-born infant, to the embryo, and back, back to the germ-cell, in which condition man is undistinguishable from the lowest forms of life. When and how, in this embryonic series, did spirit come in?

But, again, let us turn to the pathological series. Let us study man in various forms and degrees of disease. There can be no doubt, I suppose, that what we call spirit is closely connected with the brain. When the brain is disordered, manifestations of spirit

are correspondingly disordered; when the brain is injured, weakened, destroyed, manifestations of spirit are injured, weakened, destroyed. Does there not, then, seem to be a relation between spirit and brain similar to that which exists between every function and its organ? Are not thought, emotion, etc., products of the brain as bile is a product of the liver? Only the product is higher in proportion as the structure of the organ is more refined.

But, lastly, let us study man in relation to the lower animals, in what may be called the natural history series. What is spirit? Surely it is that in us which thinks and feels and wills. But, does not a dog too feel and will, and perhaps think? What are the faculties of spirit? Surely memory, imagination, love, anger, are among them; these are treated of in every text-book of mental philosophy. But have not the higher brutes clearly all these? There is scarcely a faculty of our minds, but something closely resembling it may be found in brutes. It seems to be a difference in degree rather than in kind.

Thus, then, we seem to be driven to one of two alternatives; either there is no such thing as spirit—it is a mere product of organization—or else it must be coextensive with life itself.

But, suppose we accept the latter alternative, the difficulty does not stop there: life itself is only transformed physical and chemical force. There was a time when matter was supposed to be annihilable. When matter was consumed in combustion, it was supposed to pass out of existence. But, now we know that matter changes its form, passes from the visible

to the invisible, but is itself indestructible except by the same power which created it. The same is true of force. Force and motion change their form, pass from the visible form to the invisible form, but are themselves indestructible. Heat is changed into mechanical force and vice versa, visible motion into invisible motion, bodily motion into molecular motion; heat, light, electricity and chemical affinities, are changed into each other back and forth; but, amid all these changes, the same quantity of force remains.

Now, vital force is no exception to this law. ical and chemical forces are changed into vital force and vice versa. As sun-heat, falling upon water, disappears as heat, to reappear as mechanical force which lifts that water into the clouds, so sunlight, falling upon the green leaf, disappears as light, to reappear as vital force which lifts matter from the plane of inorganics to the plane of organics. As, when fuel is burned in a steam-engine, with the formation of carbonic acid and water, the chemical forces of combustion are changed into mechanical force, so, also, when food is consumed in our bodies, it is burned with the production of carbonic acid and water, and the chemical energy of that combustion is transformed into muscular energy, intellectual energy, emotional energy. As the organic kingdom is so much matter taken from the general fund of dead matter, retained in a certain form for a little while, and at death again returned into the common matter of earth and air, so also organic and vital force are so much force drawn from the common fund of physical and chemical forces, to be again at death returned to that general fund.

See, then, how swiftly the current sweeps us away toward the dark gulf of materialism, and with it carries away all our hopes, our aspirations, and all that ennobles our humanity!

My Christian friends, my own scientific studies have been chiefly in the three series mentioned above. During my whole active life, I have stood just where the current runs swiftest. I confess to you, that, in my earlier life, I have struggled almost in despair with this swift current. I confess I have sometimes wrestled in an agony with this fearful doubt, with this demon of materialism, with this cold philosophy whose icv breath withers all the beautiful flowers and blasts all the growing fruit of humanity. This dreadful doubt has haunted me like a spectre, which would not always down at my bidding. But, in later years, I have learned to see that, for a solid basis of our belief in spirit, we must not look to reason, but must return again to the clear revelations of our consciousness and the still clearer revelations of Scripture. I have learned to recognize that a true philosophy accepts the revelations of consciousness as well as of sense, and strives to reconcile them; that a true faith accepts the dicta of Scripture as well as of science, and strives to reconcile them.

This, indeed, is the only true domain of reason: frankly accepting the gifts of the several revelations as the materials of knowledge, it builds upon each of these a consistent system, and then strives to bring these systems into harmony with one another. For, observe, material science does not destroy the grounds of our belief in immortal spirit; it cannot do so, be

cause it belongs to a distinct system having different bases; it only turns away the mind, and absorbs it in another system—it simply ignores it. It does not tear up by the roots the plants of faith—the tree of spiritual life—it only impoverishes the soil of our minds and hearts until they no longer flourish.

After this long but, I believe, not unnecessary introduction, I again return to the immediate subject of my lecture.

I have said that, in later years, I have been content to moderate the arrogance of my earlier efforts. learned to accept the existence of immortal spirit as a direct revelation, and my whole effort has been to reconcile this fact with the teachings of Nature. I have attempted to explain to myself, the relation of the immortal spirit of man to the anima of animals, the vital principle of plants, and the physical and chemical forces of Nature. It may be that my attempt is presumptuous; it may be that the state of human knowledge is not yet ripe for such an attempt; it may be (but I do not think so) that my views, pushed to their logical conclusion, lead to some dangerous or fatal form of error; it may be that they will offend the traditional beliefs of many: but I cannot mistake the current of scientific thought, nor doubt the necessity, either now or shortly, of such an attempt. With much hesitation, therefore, I present my thoughts, hoping you will make every allowance for unavoidable imperfection.

As I have already stated, there are two poles of existence, without the recognition of which, philosophy is impossible; they may be variously represented as

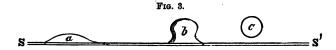
matter and force, or matter and spirit, or Nature and God. Matter is essential *inertness*, spirit is essential *activity*. The very origin of our notion of force is, I believe, the consciousness of our own mental energy. Matter reveals itself to our senses, but energy, or force, only to our consciousness. We then extend it to external Nature.

What, then, is force, or the universal energy of Nature? It is an effluence from the person of Deity pervading the universe—an effluence closely connected with Him, yet distinct from his person. It is necessary to remember this, otherwise we fall into pantheism. What is spirit? It is this same all-pervading force of Nature—this same Divine energy, or a portion of it, individuated more and more until it becomes a separate entity, a self-conscious person. The Divine Spirit, brooding upon primal chaos, communicated to it an influence, an energy, a life, call it what you like, which became the force of evolution of the cosmos, and still controls and maintains its beautiful order. A fragment of this all-pervading force, a spark of this Divine energy, individuates itself more and more until it assumes complete individuality or personality; and then we call it spirit. Thus, spiritual influence, proceeding from the Divine person and energizing Nature, struggles on upward until it again returns to recognition of the source from which it proceeded.

Let me explain a little more in detail. The natural forces are the Divine effluence, the Divine energy unindividualized, generalized. Now, portions of this all-pervading force, sparks of this Divine energy, commence to individuate themselves—struggle upward to a

higher plane and attain life in plants. Again, by an inevitable law, a spark struggles upward, and, under the higher conditions of the animal organism, individuates itself more completely, and becomes the anima, the soul of animals; in addition to life, it attains sensation, consciousness, will, instinct. Again, a spark of the pervading Divine energy struggles still upward, and, under still higher conditions, completes its individuality and becomes the living soul, or immortal spirit of man; it attains, in addition to consciousness, self-consciousness; in addition to will, free, self-determining will; in addition to instinct, reason; it becomes Thus, there has been, a separate entity, a person. throughout all time, a gradually increasing individuation of the Divine energy, or the forces of Nature, which was completed only in man.

I will try to make myself still clearer by means of a rude illustration. Let this water-surface, SS, represent



the general fund of natural forces, physical and chemical. Under certain conditions, the general surface commences to individualize itself—is drawn up as a commencing drop, a; this represents the condition of the vital principle in plants. Again, under certain conditions, a portion of the general surface individuates itself more completely—is drawn up into a far more perfect drop, which already looks like a drop, b; this represents the condition of the anima or soul of ani-

mals. But, again, under still higher conditions, the individuation becomes complete; the drop c becomes a separate spherical entity; this represents the condition of the living soul, or spirit of man.

Now let us see the effect of death. Suppose in our illustration that gravity be annihilated, and only cohesive attraction remain. If, in the case of a, the conditions of individuation be withdrawn (death), the commencing drop sinks back, and is merged into the general surface, SS'. Again, in b, withdraw the conditions of individuation (death), and the almost completed drop is again drawn back by cohesion, and merged into the general surface. But, in c, the separation is completed—cohesion no longer exists; the withdrawal of the conditions of individuation (death) cannot affect the already separated entity. Thus, then, as the organized body by death is returned again to the dust from which it came, so organic forces, the vital principle of plants, and the anima of animals, by death are returned to the general fund of physical and chemical forces with which they are so closely, I may say cohesively, connected. But the spirit of man, because it is a separate entity, because its individuality is completed, is not affected by death of the organism; i. e., it is immortal—it is capable of independent life.

Therefore, as there are various degrees of organic, material individuality, the germ-cell, the egg, the embryo, the perfect offspring, and, of these, only the last is capable of independent life, so, also, there are various degrees of kinetic, spiritual individuality; but only the last term is capable of independent life. Therefore, in the plant and the animal we have spirit in em-

bryo, within the womb of Nature, unconscious, incapable of life. In man, spirit came to birth, became capable of independent life. Thus, man alone, of all the objects of Nature, is the child of God.

Or, to use another illustration: in plants and animals, spirit is deeply submerged, and, as it were, drowned in Nature, and in perfect darkness. In man alone, spirit appears above the surface and emerges into the light. It looks downward upon Nature; it looks around upon other entities like itself; it looks upward to the heavens above. It rises out of Nature, above Nature, and becomes the interpreter of Nature.

As there are several planes of material existence, raised one above the other—mineral kingdom, vegetable kingdom, animal kingdom—so there are several planes of force raised one above the other, viz., physical force, chemical force, vital force, spiritual force.

It seems to me that the whole significance of man is contained in, and necessarily flows from, this one idea of a completed spiritual individuality—a separate spiritual entity. This separation is necessary to the idea of self—of the distinction of the ego and non-ego. It is necessary to man's viewing Nature objectively, and thus becoming its interpreter. It includes, of necessity, the idea of free-will, i. e., of a will not as it were physically bound to and entirely controlled by the laws of Nature, but self-determining. It includes the idea of moral responsibility, for the spirit must be a separate entity before it can see its relations to other similar spirits, and to God. We have already seen it includes also the idea of immortality.

Completed individuality-separation from the all-

pervading forces of Nature—this is the distinctive characteristic of man. But, is not this, in some sense, separation from God? Yes, it is severance of physical connection, in order that he may thus enter into a higher moral relation. I will illustrate again from Nature: As matter cannot obey the beautiful laws of motion determined by gravity until cohesive connection with other matter is severed; as planets and moons cannot obey the beautiful laws of motion which constitute the harmony of the solar system until they are separated from each other and from the sun, and become separate cosmical entities; so also spirit must first be severed from physical connection with the Divine energy before it can enter into higher moral relations with other spirits, and with God; it must become a separate spiritual entity, before it can obey the beautiful laws of moral order determined by love.

Thus, then, throughout the whole geological history, Nature struggled ever upward, to attain first life, then conscious life, then self-conscious immortal life. Man, therefore, is the term, the completion, the ideal of the progress of Nature. But does progress stop here? By no means. Man himself takes up the progress and carries it on. Where natural history ends, providential history commences. The history of redemption takes up a new progress with a still higher goal, and Nature, under the guidance of the Divine spirit, again struggles upward and attains divinity in Christ. Thus it reaches the last possible term, union with Deity, from which it originally proceeded. And we, too, by diligent culture of mind and heart, by the study of the two Divine books, we too must ever strive to share in this Divinity, to become partakers with Christ of the Divine life, to attain through Christ union with Deity. Union, but free union. Not loss of individuality, not absorption of our life into the Divine life, but harmony of our life with the Divine life through supreme love.

Thus, as spirit struggles upward to birth in man, so the immortal spirit of man must struggle ever upward to attain the new birth in Christ. As Nature in geological history is full of types and prophecies which all point to and are fulfilled in man, the first Adam, so Scripture, or providential history, is full of types and prophecies which all point to and are fulfilled in Christ, the second Adam. As natural history finds its completion, its ideal in the natural man, so human history finds its completion and ideal in the Divine man. Finally, if it be our duty to enjoy with grateful hearts the use and beauty of this earth, our prepared abode, with how much more joy and gratitude should we anticipate the possession of those more glorious mansions prepared for us above!

LECTURE XVII.

PROBATION OF MAN.

You well remember, my Christian friends, that in my last lecture I stated, on the authority of Scripture, that the characteristic of man is that he is an immortal spirit in the image of God. This fact is clearly revealed in Scripture; it is also clearly revealed in consciousness. It should therefore be accepted as the starting-point of reasoning and the basis of philosophy. But Nature, too, is a Divine revelation, and Nature reveals very clearly the close connection of the spirit of man with the animating principle of brutes, and through this with the vital principle of plants, and through this with the physical and chemical forces of Nature. This, therefore, ought also to be accepted as certain, and must also form the basis of philosophy.

Thus, then, the domain of reason on this subject is narrowed down to the reconciliation of these two certain facts. This we attempted to do by showing that the general forces of Nature are an effluence from the Divine person—that this diffused Divine energy throughout all time individuated itself more and more, until it finally assumed complete individuality—or

separate entity or personality in man; that throughout all geological times spirit remained, as it were, in embryo, gradually developing within the womb of Nature until it came to birth in man, and became capable of independent life. This idea of complete spiritual individuality, of separate spiritual entity-of capacity of independent life—this one idea I then attempted to show included every other characteristic of man; it includes self-consciousness-free-will or free agency. moral nature, moral responsibility, immortality. fact, all these are convertible terms—different modes of regarding the same thing—they each include all the I touched on this subject with some reluctance, but I could not avoid it, as it forms the key to all I shall further say of man, and particularly is it intimately connected with my lecture to-night, the subject of which I now announce as " The Probation of Man."

You are all familiar with the tragic story of the probation, temptation, and fall, of primal man. In whatever sense we take this story, whether literally or as an allegory, there is, without doubt, a deep philosophical truth contained in it. My object to-night, however, is not to speak of the form of the primal probation, but of its necessity.

Why, then, was man put upon probation? Some will answer, "Because such was the will of God," and seem to think that this should put an end to all inquiry. But the will of God is not caprice. I have already shown that the will of God is the law of reason. There must, therefore, have been a profound reason, based in the very essential nature of man himself.

which rendered probation suitable, and even necessary. What, then, was the necessity of primal probation? I answer: 1. Probation is a necessary result of free agency or free-will; 2. Probation is a necessary antecedent, or means of attaining the true goal of humanity, moral freedom, or holiness.

1. Probation is the necessary result of man's free agency. Free agency, or free-will, as we have already shown in our last lecture, is inseparably connected with and flows out of the idea of complete spiritual individuality. It is, therefore, the distinguishing characteristic, the crowning glory of man. It is that which constitutes him man, which makes him the child of God. Is it, then, conceivable that man should be placed in such a position as never to exercise this characteristic power, as never to show his humanity! If man is a moral agent, freely choosing good or evil, right or wrong, and this power of free choice constitutes his crowning glory, shall he not have an opportunity of exercising it? Life and happiness consist in activity; human life and happiness, in so far as they are distinctive, consist in the exercise of the distinctive powers of man; and, of these, the most distinctive is free-will, Surely, then, man's nature demands an opportunity of displaying, of exercising this distinctive power. Such an opportunity is what we call probation.

Probation, then, is inseparable from our moral nature, and especially from our material earthly life. The very significance of our earthly life consists in this. We are put here to exercise our power of choosing the right, and thus to cultivate our moral nature. Every thing is evidently arranged for this end, not only the nature

of man, but external Nature—providences, the Scriptures, all revelations, and, therefore, all means of culture.

Let me illustrate: External Nature is a revelation of Deity; but this revelation is not so clear as to compel faith in all men, like a demonstration in geometry. On the contrary, external Nature is so related to the nature of man that it becomes a touchstone of his moral character. It depends entirely upon the temper with which man approaches the study of Nature, what his free-will chooses to find there, whether he sees there a living God or only dead mechanism. If he approaches with an open mind, and a pure heart, and a humble spirit, the revelation of Deity will become clearer and clearer, until "the whole earth is full of his glory." But, if, on the other hand, he approaches Nature, choosing and desiring to find no God, no intelligence, no beneficence. He will find every thing confirm him in his foregone conclusion, until he ends in confirmed and honest materialism. Thus, in Nature, God conceals, while He reveals himself-conceals himself from the eye of unbelief—reveals himself to the eye of faith. "Blessed are the pure in heart, for they shall see God."

Similarly, God conceals while He reveals himself in the history of our race, and in our own individual history. Except from this point of view, how incomprehensible seem the ways of Providence! How often our most virtuous strivings fail! How often the good and great man is cut off in the midst of his usefulness, and the vicious prosper even to old age! How often the righteous cause seems to fail, while the unrighteous cause triumphs! We can only exclaim, "Mysterious Providence!" It again depends upon the condition of our hearts, and in some degree of our will, whether we see in our own individual history, and in the history of our race, a loving heavenly Father, or a God indifferent to human affairs, or no God at all.

The Bible is, we believe, a still clearer revelation of Deity, but even this revelation was not made in a form which compels immediate and universal conviction. On the contrary, it depends upon the condition of our hearts and wills, upon the temper with which we study it; whether or not we recognize its Divine origin. If we approach with a pure heart, desiring truth, the evidences of Divine origin will grow brighter and brighter to the light of perfect day. But, if we approach it in the spirit of pride, choosing to find the evidences of human origin only, we shall find what seems to us evidence in abundance, and we may even reach honest unbelief in its Divine authority. "We are given over to believe a lie."

Observe, finally, the mode of teaching of the Divine Master. It is an epitome of all Divine teaching, of all revelation, and this becomes additional evidence of his divinity. He taught the multitude in parables which concealed, while they revealed Divine truth. You will remember his disciples on one occasion asked Him why He taught in parables rather than plainly. His answer is very significant: "That seeing, they might see and not perceive; and that hearing, they might hear and not understand." In other words, all his teaching, like all revelation, was of such character that it became a test, a touchstone, a probation of the character and choice of the hearers. If the heart were

good ground, the seeds of truth would germinate and bring forth a hundred fold; but, if not, the birds of the air would carry them away.

Now, suppose for a moment that all this was different. Suppose in Nature we saw the hand of God working visibly everywhere—suppose that in every case vice failed and virtue succeeded, and happiness and misery were accurately and evidently proportioned to right and wrong doing-suppose the Divine authority of Scripture were demonstrated every day and to all men by miracles: is it not evident that the whole significance of this our earthly life would be changed? is it not evident that there would be no longer any opportunity of choice between good and evil; that virtue would be compulsory, and therefore no virtue? There would be no testing of our moral nature, no exercise of free-will, and therefore no cultivation of our highest characteristic. Probation, therefore, in some form, is inseparable from a finite moral being, and especially so from an earthly, material life.

Thus, then, all revelation, all the conditions which surround us, are so arranged as to compel free choice, to exercise our free-will. This earthly life is a school in which to educate our self-determining power; the power to keep in the strait way in spite of solicitations to the right and the left, until solicitations finally lose their power over us for evil; the power to stand erect in spite of forces tending to overthrow, until, finally, our balance becomes easy and even unconscious. In a word, this earthly life is a time in which man the child must learn to walk.

Probation, then, is necessary to our earthly exist-

ence: it was necessary to primal man; it is necessary to us now; it is necessary always. But probation then was different from probation now. Then, man was left to his own strength; now, we are helped because of inherited evil. Then, man must learn to walk himself; now, the Father stoops downward and holds us by the hand, and helps us to learn. The wayward, self-willed child must learn, by bitter experience, his own weakness before he will trust his loving father.

Thus, then, I think it will be admitted that probation of some kind is inseparably connected with our moral nature. It is necessary to the exercise of our free-will. Now, it is only by the exercise of free-will that it is possible to reach the goal of humanity. This brings me to the second point:

2. Probation is the necessary antecedent to the only means of attaining the true goal of humanity, viz., moral freedom, or holiness. But, some will doubtless ask in surprise: "Was not primal man holy? Was not new-born spirit, fresh from the creative hands of Deity, holy?" I answer: Innocent, but not holy; and holiness is far different from and far higher than innocency.

Let me explain: The ideal man is not what asceticism would make him, i. e., man, with his lower sensuous nature dwarfed or entirely eradicated! No, the ideal man is complete in his humanity—every faculty, emotion, passion, appetite, perfect; but each in its appropriate place. He does not differ from us by standing on a platform above us, but, standing on the same common level of earth, he is taller by the head and shoulders; his lower parts on the same level, his higher parts are higher. Even the Divine Master possessed our

whole human nature; he was more human than we; he sympathized more deeply with every feeling and passion of our nature than we do with one another. In the ideal man, therefore, there must be solicitations, yea, even strong solicitations of passion, appetite, self-interest, etc., but reason and will are far stronger, and control all. Every faculty, emotion, passion, appetite is present, but the lower subordinate to the higher, and all move in perfect harmony, making sweet music together.

This spiritual harmony is the ideal. Yes, but there are two ideals—one from which we come, the other toward which we go; the one which we have lost, the other which we ever strive with Divine help to attain; one is the starting-point of humanity, the other is the goal of humanity. There are two kinds of spiritual harmony. The one is established by Nature, without our coöperation: it is spiritual health in which, as in bodily health, all the functions are performed in perfect harmony; it is spiritual harmony, spiritual beauty, but not ours. The other is self-determined, is made ours by the free choice of our free-wills. The former is innocency; the latter is moral freedom—holiness.

There is an absolute unity in Nature. The law of the whole is epitomized in the parts. The law of development of the human race is epitomized in the law of development of the individual. Now, as, in the development of the individual, we have first the innocency, the perfect harmony of childhood; then, free-will entering as a disturbing element, introducing anarchy and confusion; then, finally, under favorable conditions, by the exercise of the same free-will, and with Divine help,

we reëstablish (but, alas! imperfectly) a higher harmony—Christian freedom—holiness; so, in the development of the human race, we commence with innocency—yes, even though the human spirit were evolved from the forces of Nature, it could inherit from Nature only harmony, i. e., innocency—we commence first with innocency; then free-will enters as a disturbing element, introducing anarchy and confusion, and yet it is only by the exercise of free-will, with Divine help, that the race also must attain its goal—moral freedom—holiness. This condition of humanity is the kingdom of God for which we daily pray.

Thus, then, while in Nature there is but one kind of harmony, the natural, established by God alone, in man there are two kinds, the natural and the moral. The one is preëstablished by and inherited from Nature, the other is self-determined by the free-will. The one is according to the law of instinct; the other is according to the law of the self-conscious reason. The one is a passive condition, like the harmony of the spheres, like the harmony of the healthy body, beautiful, but established by Deity, and therefore not ours; the other is an active condition; it is a similar harmony (for Nature is true), but understood by the reason, or else accepted by faith, and made our own by free choice. Again, I repeat, the one is innocency, the other is moral freedom—holiness.

Freedom! Oh, my friends, does not every generous heart, sigh and pant for this? Do not our hearts tell us that this is the true goal of all our strivings, both as individuals and as a race? But let us not mistake its nature. True moral freedom in the

individual is that condition of the soul in which all the faculties and powers move freely and consciously together in perfect harmony, and in accordance with Divine law. In the race, it is that condition in which all the members of society move freely together in perfect accordance with the same law. This, alone, is true freedom, the goal of humanity; all other freedoms, so called, are good only in so far as they are helps to the attainment of this.

But, observe, I said "freely in accordance with Divine law." Innocency, too, is in accordance with Divine law; but not freely, not consciously-not by our choice. Innocency is perfect equilibrium, but unstable because determined by external conditions and forces. Freedom is stable, because determined by internal forces; because reason understands, and the will freely chooses the laws of equilibrium. Innocency stands erect because nicely balanced; freedom is self-righting, and therefore stands firmly, and without danger of overthrow. Innocency is indeed beautiful—beautiful like the order of the cosmos, like the harmony of the healthy body, but as far more beautiful than these as spirit is higher and nobler than matter. In proportion to the purity of our hearts, do we love to contemplate the beauty of innocency in children, as the type and image of our unattained freedom. But moral freedom, or holiness, is far more beautiful still. The type of the one is Adam, the type of the other is Christ.

As geological history developing through infinite ages reached its goal in man, so human history must ever strive to reach its goal in the freeman. As Nature through infinite ages struggled upward to attain *life* in

plants, then will in animals, and finally free-will in man, so man, by the exercise of free-will, and with Divine help, must ever strive to attain moral freedom, or holiness.

But, perhaps, it will be asked by some: "You say probation is inseparably connected with our moral nature, and especially our earthly life; suppose, then, primal man had not fallen, would each man still be upon probation? If primal man had passed from innocency, by the exercise of free-will, directly to holiness, would each of us still be upon probation?" My friends. I know not whether we can make such a supposition-I know not how far the fall of man is connected with the necessary laws of evolution of the human race from innocency to freedom. I know not how far the freewill of primal man may have determined the direction of that evolution; this question is but one branch of that deeper question, the relation of free-will to invariable law; a question which I will discuss in my next lecture. But the will of man being free, it is at least conceivable that the result might have been different; in that case the question recurs, Would we still be on probation? I answer, undoubtedly so; although the conditions of probation would then be different from those of probation now, and both different from that of primal man. It is impossible to conceive of the earthly life of a moral being which is not a probation in some sense.

But would each individual man be liable then to failure? I answer, No; for, though innocency is unstable, moral freedom is stable. We have seen that the law of development of the race is similar to the

law of development of the individual. A holy race is therefore stable, as well as a holy individual. In fact, the race in some sense is an individual through the law of heredity-that law so freighted with blessing or with curse. The same law, therefore, which now makes individual probation, without help, certain failure through inherited weakness, evil, discord, would then make individual probation certain success through inherited strength, virtue, holiness. As wealth and its opposite, debt, are the accumulated results of welldirected or misdirected material activity, so holiness and unholiness are also the accumulated results of welldirected or misdirected free-will. But as wealth or debt is partly inherited and partly individual accumulation, so also holiness or unholiness is partly an inherited and partly an individually acquired condition. The same law, therefore, which now through inherited debt makes us all bankrupts, would then through inherited wealth make us all heirs of heaven.

LECTURE XVIII.

PREDESTINATION AND FREE-WILL

You will remember, my Christian friends, that in my last lecture I tried to show that free agency or free-will is an essential characteristic of man—it is that which constitutes his moral nature, that which constitutes him man, and that which makes him a spiritual child of God; that it is by the exercise of this that man passes from innocency to moral freedom, the true goal of humanity. The essential nature of man, therefore, consists in free-will.

But, in one of my early lectures, I showed that the essential nature of Deity is absolute, unconditioned Being—all-sustaining, all-embracing, all-controlling—Being in whom all things exist, and by whom all events happen. All revelation, both Scriptural and natural, reveals this as the essential nature of Deity.

Now, the question arises: "How does this absolute, all-controlling sovereignty, which is the essential nature of Deity, consist with free-will, which is the essential nature of man? Does not the former exclude and annihilate the latter? Does not the latter limit the former?" This question is the subject of my lecture this evening. In religious philosophy, it is the question

of absolute sovereignty of Deity in relation to free-will of man, or predestination and free agency; in scientific philosophy, it is *free-will* of man in the presence of universal and invariable law.

My friends, this is the deepest question in all philosophy. Its true solution lies far above us, in the region of the unconditioned; we strive in vain to embrace and comprehend it with our finite minds. All we can expect to do, as we strain our eyes in upward gaze, is, in our highest moments, to catch some glimpses of partial truth; from different points of view, to catch some broken lights glancing from its many-sided surface. But no human mind has yet been able to take these views from different points, and stereoscopically combine them into clear, objective reality, to unite these partial truths into clear, philosophic comprehension.

The fragmentary thoughts which I throw out on this subject are mostly the result of my own unassisted thinking; my pursuits having been of such nature as to lead me away from profound metaphysical studies. I hope you will not think I mention this in the way of boast; on the contrary, I do so by way of apology for what may seem crude. I know too well that no man can think maturely unless he thinks in the light of other men's thoughts. Nevertheless, I hope some of my thoughts may be of interest in so far as they present the subject from an unusual point of view.

I have already said I am unable to give you any thing but partial views from different points. Three such I will attempt to present to-night. I wish to show—1. That, from the absolute Divine point of view,

the question lies entirely beyond and above the plane of human thought; that—2. From a human or more properly a Divine-human point of view, we catch some glimpses of a true solution, but—3. That, whether explicable or not, both sides are in some sense true, and a belief in both absolutely necessary to a religion at the same time pure and practical.

1. The absolute Divine point of view. In one of our earlier lectures, we spoke of eternity as an essential attribute of Deity; but few persons, I believe, reflect on the meaning of eternity in this connection. The words time and eternity are used in popular and in philosophic language in different senses. In popular language, time is a world of sense, eternity a world of spirit; time a present state of existence, eternity a future state of existence. But in philosophic language time is duration, or continuity of existence, and eternity is infinite time. This is man's eternity, eternity as it can be conceived by finite minds. But eternity, as an attribute of Deity, God's eternity, is something far different from this.

Time may be likened to an infinite stream on which we finite beings float helpless. We cannot go backward or forward, except as we are carried; we exist only in one spot, the now. Is God also floating helplessly on such a stream? Impossible. To Him there is no stream, for Him there is no such thing as time. He is unconditioned by time; this is his eternity. Time is a condition of finite existence, yea, of finite thought; but not of his absolute being. For Him there is no past, nor present, nor future. In the light of this thought, what becomes of all our vain wranglings, our

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"reasonings high, of providence, foreknowledge, will, and fate?" Foreknowledge: this is the language of time, and He is unconditioned by time. Predestination, fore-ordination: again the language of time in connection with Him for whom there is no such thing as time. We cannot speak of Him, we cannot even think of Him, except under the condition of time. If we try to think of the unconditioned, our effort ends in simple mental paralysis. How, then, shall we think of his relation to us, except in such terms as He has revealed it?

Divine-human point of view. All revelations from God to man must be presented in this Divine-human point of view. It is most perfectly realized in the person of the Divine Master. This, therefore, is the truest and most practical point of view for us. From this point of view, it seems to me, some real glimpses of a true solution may be gotten.

There is nothing which Nature so clearly reveals, and upon which science so strongly insists, as the universal reign of law, absolute, universal, invariable law—law, the symbol of the Divine sovereignty, and the expression of the perfect Divine nature—universal because He is omnipresent, invariable because He is unchangeable. Science and theology agree that this is necessary to a just conception of Deity. We, indeed, think and speak of the forces of Nature as efficient agents controlling the phenomena of Nature; but this is only a scientific formula necessary for greater clearness of thought. In the highest and truest philosophy, the forces of Nature are but the omnipresent energy of Deity, the expression of his will; the laws of Nature are but the modes of operation of that energy, and

therefore of his will; the objects of Nature are embodiments, incarnations of his thoughts; events and phenomena take place only by and according to law, and therefore according to his will. Thus, regarding the forces of Nature as an effluence from the Divine person, we may say that God himself works in Nature only within the limits of law. He cannot do otherwise (I speak it with reverence), He cannot violate law, because law is the expression of his will, and his will is the law of reason. Not one jot or tittle of the laws of Nature are unfulfilled.

I do not believe it is possible to state this fact too strongly: Law, universal and invariable, in the realm of external Nature—law, universal and invariable, in the realm of human history—law, universal and invariable—yes, it must be so—in the realm of individual consciousness. Every thing happens according to law, and, since law is the expression of Divine will, every thing happens according to Divine will, i. e., is in some sense ordained, decreed.

You will ask, then, does not this absolute universality and invariability of law in every realm of Nature, extending even to the inner realm of consciousness itself, annihilate the free-will of man? I answer, No; it only limits free will to its legitimate domain.

Laws of Nature, of society, and of our own nature, laws physical and moral, limit us on every side; to the depraved, the lawless, the wicked, these limits are prison-bounds against which the caged spirit chafes ceaselessly but vainly. Such a spirit is morally in a state of bondage. But, to the ideal man, these limits are free limits. He lovingly recognizes the limiting

law, and makes it the law of his will. His state is that of freedom. The will of man, therefore, is free only within the bounds of law.

I wish now to show how law may be invariable and universal in every realm, and yet man's will be free.

(a.) Free-will acting in the realm of external Nature. I think you will all admit that, in external Nature, law is universal and invariable, so invariable that a perfect science would be able to predict every future event with absolute certainty. Already we know that the most perfect department of science, astronomy, predicts phenomena a hundred or a thousand years in the future. Now, there can be no doubt that, were the physics of the earth and air equally perfect, winds and storms, and cold and rain, and volcanic eruptions and earthquakes, might be predicted with equal certainty as eclipses. Yet man's free-will acts and determines phenomena in the realm of external Nature, and that, too, without violating any law.

Let me explain: Law is invariable, but phenomena are variable, because determined by the variable conditions under which law operates. Therefore, the domain of free-will is to arrange conditions, and thus determine the mode of operation of law. Intelligent action, in the presence of laws which cannot be changed, is what we call contrivance. Man cannot accomplish results directly, for this is creation; he accomplishes them indirectly by contrivance. So far from violating law, contrivance is an indirect method of making use of law, and success or failure is in proportion to knowledge or ignorance of laws, and to skillful or unskillful Therefore, it is evident arrangement of conditions.

that invariable law in the realm of Nature only limits, but does not destroy, the free-will of man acting in the realm of Nature.

(b.) Free-will acting in the realm of society, history, on our fellow-men. All recognize invariability of law in external Nature, but it is not so generally recognized in society—social phenomena seem so variable, so lawless. Nevertheless, there can be no doubt that all social phenomena, marriages, births, deaths, crimes, suicides, insanity, forms of government, revolutions, successful and unsuccessful, all are subject to invariable law, and, if sociology were as perfect as astronomy, we might predict these also. Yet this invariability of law does not destroy the free-will of man in the realm of society; and, moreover, the domain of free-will here is very similar to its domain in Nature.

Let me again explain: As physical forces act in Nature, so moral powers or forces act in society. These are called *motives*. As free-will determines phenomena in Nature, not by changing law, but by arranging physical forces and conditions, so our free-will acts on our fellow-man, by arranging moral forces and moral conditions; by skillful marshaling of motives, by influence, by persuasion; not directly, but by moral contrivance. In this case as in the other, our success in determining any result, any line of conduct, will depend on our knowledge of the laws of human nature, and our skill in the presentation of motives. Observe, then, that, as before, persuasion or moral contrivance recognizes the invariability of law; but also (and it is this which makes it moral contrivance) it recognizes and is conditioned by the free-will of the fellow-man.

This is precisely the difference between persuasion and force. If we use force, we ignore the free-will of our fellow, and the whole operation falls into the category (a) of physical Nature.

It is evident, therefore, that invariable law in the realm of society does not destroy, but only limits, the free-will of man in the realm of society.

(c.) Free-will in the realm of consciousness, acting on self. Here the opponents of universal law—the advocates of lawlessness—make their final stand. If law enters the circle of consciousness and invades the citadel of will itself, is not then at last the free-will destroyed, and, all that we have called free-will in other realms ceases to be free-will? I answer: Law has, indeed, entered the charmed circle of consciousness, it has invaded the very citadel of the will itself, and yet is the will free.

Again, let me explain: All metaphysicians admit the existence of law in the realm of consciousness. It is the province of metaphysics to determine these laws. But, if there be such laws, they are Divine laws; if they be Divine laws, they are invariable. The law which determines the action of the will is called the law of motions. Now, the laws controlling moral motions—conduct—are similar to those controlling physical motion. If two physical forces are directly opposed, motion will obey the stronger force; so also, if two motives are directly opposed, action will obey the stronger motive. If two physical forces urge in different directions, but not directly opposed, motion is in the direction of the resultant; so also, if two motives urge in different but not opposite directions, conduct will be in the direction

of the resultant. I think there can be no doubt that, in all cases, human action is determined by the relative strength of motives, or moral forces, at the moment of action. Does it not seem, then, that the will lies passive under the influence of motives? How can it, then, be free?

This, I know, is a very difficult point; yet I think I see at least the principle of its solution. It is, beyond doubt, the characteristic of man, indissolubly connected with all other characteristics already mentioned, that he is able to stand as it were out of himself, and to view himself and deal with himself objectively. self-consciousness (and this is the distinction between consciousness and self-consciousness), he views himself objectively, as he would another person; observes himself, studies himself, and so constructs a science of himself; in the exercise of free-will, he deals with himself objectively, as he would another person; persuades himself, argues with himself, influences himself, marshals motives to determine his own conduct in the right direction—in a word, uses moral contrivance with himself as with others. It is as if the free, determining will were a different thing from the executive will. In this division of self into subject and object—observer and observed, active and passive—the determining will remains with the active, and the executive will with the passive self. The executive will belongs to animals as well as to man; the determining will belongs to man alone; the executive will lies passive under the power of motives; the free, determining will here, as elsewhere, arranges conditions, and marshals forces or motives, and thus determines the action of the executive will.

But how does the free-will do this? Let any one closely examine himself while under the influence of several motives, and the manner becomes evident. It is certain that we have the power of voluntarily fixing thought upon, or of turning it away from, this or that subject—of holding up before the mind and steadily contemplating this motive, or forcibly turning away the mind from that motive. Again, it is certainly a law of the mind that motives, steadily contemplated and cherished, grow stronger and stronger, while motives kept out of sight gradually fade away. This law of growth of passions and emotions, by simply being present to the imagination, is a law powerful for good, and fearful for evil, as all must know. Now, the freewill keeps certain motives, approved by reason, before the mind, and thus increases their power, while it forcibly thrusts others, not approved by reason, out of sight, and thus diminishes their power; and thus determines the action of the executive will in the right The surrender of ourselves passively to the law of motives, this is the law of our animal or sensuous nature.

Thus, then, the free-will has no such kingly authority as some would ascribe to it. When motives are nearly balanced, it cannot lay its royal right hand upon the lighter scale, and by mere force bear it down; it cannot, like the hero, lay its conquering sword on the lighter scale and weigh it down. No; its function is far more humble: it must use moral means; it must persuade. Hence, my friends, the necessity of watchful, prayerful self-culture and self-discipline, lest motives surprise us and carry us away before we can manipulate them;

hence the necessity of formation of good habits. If freewill could at any time overbear motives in kingly fashion, this would be unnecessary.

Thus, then, we have shown that invariable law in the realm of Nature does not destroy the free-will of man in the realm of Nature; that invariable law in the realm of society does not destroy the free-will of man in the realm of humanity; invariable law even in the realm of consciousness does not destroy free-will in the realm of consciousness. Invariable law and free-will, therefore, are not inconsistent or mutually exclusive. since law is, in some sense surely, the mode of operation of the Divine will—the symbol of the Divine sovereignty—therefore, the absolute sovereignty of Deity is not inconsistent with the free-will of man; these two are not mutually excluding. Again, observe that every event happens, every phenomenon is determined, entirely by law; and, yet, every event and phenomenon in which man's free-will acts, is also determined by free-will; the free-will arranges the conditions, and the Every such event, therefore, viewed in law operates. one way, is the work of God; but it is also, viewed in another way, the work of man. Human life is a closelywoven fabric of diverse pattern: law is the warp, freewill is the woof; the mode of weaving woof into warp determines the pattern.

Let me give another illustration: Social phenomena, as already stated, are subject to law, invariable law. It is the province of sociology to determine these laws. The movement of society may be represented by a wide-sweeping curve: if, as we believe, the movement is progressive, the curve is an ascending curve. It is the

province of sociology to investigate the law of that curve; if the law were known perfectly, we might extend the curve beyond the point now occupied by society. Now, this curve is composed, not of points, but of small circles, which are the circles of individual consciousness and free-will. To us within these little circles, to the microscopic eye of self-consciousness, the little whirling motions determined by free-will are clear and conspicuous, while the silent drifting along the wide-sweeping curve, determined by law, is scarcely observed; while, on the contrary, to the telescopic eye of social philosophy, these little circles dwindle to points and pass out of sight, and the wide-sweeping motion determined by law only is observed.

3. But explicable or not, both sides of this question are true; and belief in both necessary to the highest interests of man.

The free agency of man is a clear revelation of our consciousness; and belief in it is therefore immediate, intuitive, and universal. We naturally believe it, we only with difficulty learn to question it; even those who pretend to question it recognize it daily in all their actions. Not only religion, but morality, society, government, and all our conduct toward each other, assume it. If we lie passive under the law of motives, like animals, then we sweep away at once all our moral ideas, and, with them, the whole vocabulary of words which express them, and the whole foundation of society. Right and wrong, virtue and vice, love and duty, have no longer any meaning. Sin and crime become the result solely of an unhealthy physical and mental constitution, and should be pitied, and not pun-

ished; a misfortune, not a fault. Remorse—that fearful lash of the conscience—remorse for sin becomes regret for mistake. Indignation against a fellow-man for grievous wrong is as senseless and irrational as the rage of a child toward the stone against which he crushes his foot; and punishment as absurd and laughable as the child whipping the offending stone,

Free-will, then, is an undoubted revelation of consciousness, and therefore certain; but Divine sover-eignty is a clear revelation of Scripture and the final result of thought both in science and philosophy, and therefore also certain. He who denies the one, "palters with his conscience in a double sense;" he who denies the other has never thought on the mystery of existence.

But this question is not confined to Christian thought; it is not a question of Christian philosophy alone, much less of the creed of any sect; it is as universal as the reason of man. In every age and country, wherever man has thought deeply, this question emerges. The Greek, Roman, and Hindoo philosophers discussed it. It takes different forms in different ages and classes of minds. In Christian philosophy, it is predestination and free agency; in scientific philosophy, it is invariable law in relation to free-will; in the mind of the Greek, it took the form of fate or destiny in relation to free-will. The fearful interest of the Greek tragedy consisted in the dread mystery of this relation; inexorable Fate moving slowly but inevitably to its end, and the free-will of man struggling heroically but vainly against it.

There is, indeed, an insoluble enigma in human life,

but this question is not the only mystery—the enigma is not confined to this question. On the contrary, there is a fundamental antithesis in all human philosophy, of which the very nature of man himself—a clod of earth animated by an immortal divine spark—is the symbol. Man himself is an enigma, fitly represented by a sphinx with its animal body half buried in the earth, while its divine-human head rises into the clouds of heaven! The study of this double nature gives rise to the opposite philosophies, never yet reconciled—the material and the ideal.

Now, if man's nature is irreconcilable through the divine spark with which his animal nature is associated, how much more mysterious and incomprehensible must be the relation of the Divine and the human! The Scriptures, therefore, which treat of the highest ideas, as we might expect, are full of such irreconcilable views: they speak of God as immutable, yet as repenting and changing his purpose; God is unchangeable, governing all by invariable laws, yet in prayer we must believe that in some sense we move the heart and change the purpose of Deity. Christ is perfect God, yet also perfect man. The Scriptures are wholly divine, yet are they also human. In all these cases, one is the Divine and the other the human point of view. These are the mysteries of Scripture, but how different from the mysteries of pretended revelations! These are true mysteries—mysteries the solution of which lie above the plane of human comprehension. The Scriptures do not, therefore, attempt to explain them, but simply hold up to human view first one side and then the other: the Divine side, to give us a

just conception of Divine majesty; the human side, lest the Divine majesty should seem too high above us to reach with our love: the one, that we might worthly reverence and worship, the other that we might also love Him: the one is necessary to a *pure* religion, the other to a *practical* religion.

Now, the question which has occupied us this evening is precisely one of these mysteries. It cannot be completely explained, because the complete solution lies above the plane of human thought. It has a Divine and a human side, the one necessary for the purest and highest form of religion, the other necessary for practical religion; in fact, necessary as a foundation for the fabric of human society and human life.

As Christ is perfect God, and yet perfect man—as the Scriptures in one sense are the work of God and in another the work of man—so human life, human history, and human destiny, in one sense are wholly determined by law and in another sense wholly determined by freewill, are wholly the work of God, and yet wholly the work of man. The fabric is woven, warp and woof, but so woven that, viewed in one direction, the color and shape of the pattern seem wholly determined by the warp, but, viewed in another direction, they seem wholly determined by the woof: in one direction it seems all warp, in another direction it seems all woof.

LECTURE XIX.

PRAYER IN RELATION TO INVARIABLE LAW.

My Christian Friends: In my last lecture, you will remember I stated that both human nature and Scriptural revelation are full of mysteries—mysteries which have two sides, incapable of complete reconciliation. One of these, viz., the sovereignty of God and the free agency of man, was the subject of my last lecture. Among others mentioned was an unchangeable God, and yet the duty of prayer, "or prayer in relation to the universal reign of invariable law." This is the subject of my evening's lecture.

My friends, I wish I could have avoided this question. I confess to you I shrink from touching upon a subject at the same time so difficult and so sacred. I confess to you, I fear to enter the innermost sanctuary of our religious nature, the closet of secret prayer; to lift the veil which conceals from every eye, but the all-seeing eye of God, this holiest of holies, and to touch, with what may seem to you the unholy hands of human reason, the altar from which incense daily rises and upon which sacrifice is daily laid. But I cannot, I dare not avoid it. Others, many others, in these later times, have entered before me, and with sacrilegious

hands have tried to tear down that altar, and to trample under foot and pollute the sacrifice; they have attempted to prove that, in the presence of invariable law in every realm of Nature, the spirit of prayer is irrational and absurd, the act of prayer a superstition, and the posture of prayer therefore debasing.

If these things had been said only in philosophical disquisitions, I would not have deemed myself called on to take up this subject; but they have been obtruded upon the public in lectures and addresses, and even in the daily prints. There has been in recent times much talk even of subjecting the efficacy of prayer to the test of scientific experiment. In ridicule, it has been proposed to have prayer-gauges, as we have rain-gauges; to construct instruments to measure the abundance of the outpouring of Divine blessings in answer to prayer, as we have instruments to measure the down-pouring of rain; these nimble-witted gentlemen not observing that the very thought of such an experiment is inconsistent with the true spirit of prayer, and therefore destroys the very conditions under which alone Divine blessings are given.

I will not cry, "Blasphemy!" as many religious men have done, because I do not think this does any good, and may do much harm, and because, moreover, I believe that many earnest, truth-seeking men have talked and written imprudently on this subject; but I do say that (such men, whatever they may know of the spirit of science, know little of the true spirit of prayer.)

My object this evening, therefore, is twofold: first, to show the rational grounds of our belief in the efficacy of prayer; and, second, admitting that efficacy,

to show its relation to the invariability of law. In connection with this latter, I will touch on the limits, if any, of the province of effective prayer:

1. First, then, the rational grounds of belief in the efficacy of prayer. I wish you to observe, here, that I put aside grounds derived from the statements of Scripture, and that I put aside also grounds derived from Christian experience. I present only such philosophic grounds as ought to affect all thinking minds, whether believers or skeptics.

I think I may affirm with confidence that whatever is a necessary condition of our activity we must believe in; must be true for us; must have an objective reality; and therefore needs no proof, since it is already more certain than any thing can possibly be made by proof.

Let me illustrate: Perhaps the most undoubting faith which we have, next to our own existence, is in the existence of external Nature. But this faith is not founded on proof by any process of reasoning. On the contrary, some philosophers have thought that, by reasoning, they could disprove, or at least bring in doubt, the existence of the external world. By looking ever inward and never outward, by shutting the study-door, closing the senses, turning the mind inward upon itself in deep thought, some philosophers have succeeded in constructing a philosophy which makes the external world but a phantasmagoria of internal states, projected outward by a law of the mind. But, as soon as the philosopher opens his study-door and looks outward, and especially as soon as he steps out into the busy world, all his faith returns. The reason is, because the

external world is revealed through the senses and especially through activity, being the necessary condition of activity. Our activity is certain; whatever, therefore, is the necessary condition of that activity, is equally certain, far more certain than any thing can be made by any process of reasoning. In proportion to the intensity of our life, and activity in the external world, is the absoluteness of our certainty in its existence.

The existence of the external world, therefore, is the basis, not the subject-matter of physical philosophy; the starting-point of reason, not a truth found in the course of reasoning.

So also our belief in a spirit-world, in the existence of God and the human soul, is not founded on any process of reasoning. On the contrary, reasoning first led men to doubt. By persistently looking outward and never inward, some philosophers have thought that they could disprove the existence of spirit, but as soon as the philosopher turns his thoughts inward, and especially when he commences activity in the spiritworld, all his faith returns. The reason is, again, because the spirit-world is revealed in consciousness, and especially through activity in that world, and in proportion to the activity of our higher spiritual nature does our realizing faith become stronger. The existence of a spirit-world is the necessary condition of our spiritual activity; the activity is certain, the necessary condition must therefore be certain also. This, therefore, is the basis, not the subject of a spiritual philosophy.

Now, our religious nature is a fact, an undoubted scientific verity. Even the materialist must admit it. This religious nature of ours has wants and activities, as well as our material nature—wants which must be satisfied, and activities which must be exercised and cultivated. Now, I do not hesitate to assert that the recognition of God in his paternal relation, the belief that He is our spiritual Father, and that therefore we may approach Him and influence Him by prayer, is the essential condition of the satisfaction of our religious wants, of the exercise and cultivation of our religious nature. As certain, therefore, as is the fact of our religious nature, so certain also is the condition of its activity, viz., the efficacy of prayer. Whether we can explain it or not, whether we can reconcile it with invariable law or not, makes no difference, it is certain, and belief in it thoroughly rational.

This, then, is the basis, not the subject-matter of religious philosophy; the starting-point of reason, not a fact to be proved or disproved by reasoning. Let us rest firmly here. This is sufficient for us as religious men.

Yes! sufficient for religion, but not for philosophy. Philosophy should, indeed, accept the efficacy of prayer as a verity, but there is another verity equally certain, and which, therefore, she is equally bound to accept, viz., the universal reign of invariable law. Accepting these two verities, the domain of reason is restricted to the explanation of their relation to each other. This brings me to my second point:

2. How shall we reconcile the efficacy of prayer with the invariability of law in every realm of Nature?

I am sure you will agree with me when I assert that the most important objects of prayer—so important that, in comparison, all other objects vanish out of sight; so important that, if we were wise to see rightly, there would be no other object—that the most imporant objects of prayer, I say, are spiritual blessings, on ourselves and on our fellow-men; daily bread, not for body only, but daily spiritual bread from his table above for ourselves, and his kingdom come, and his will done on earth. This is the burden of our Lord's prayer. Is there, my friends, any truly worthy object of prayer but this? God dwelling in our hearts; his image growing brighter and brighter there; our life united with his life, and we thus becoming partakers of his perfect nature; his will become our will-in a word, holiness, spiritual beauty, spiritual freedom: and this for ourselves, and for our race? Does not this swallow up and contain within itself every other conceivable blessing? It is of the efficacy of prayer for spiritual blessings, therefore, that I shall now speak; and, first of all, of-

(a.) The efficacy of prayer in the realm of consciousness—prayer for spiritual blessings on ourselves. This is the germ, the starting-point of all spiritual blessing. All commence here, and then diffuse outwardly by our activity. The efficacy of prayer here, too, is completely explicable, and therefore I take up this first.

The Divine will, we must believe, is always to confer every spiritual blessing, every real good, on all men. All revelation of himself in Nature, in Scripture, in Christ, is expressly intended for this; all the laws and forces of Nature tend toward this. He is truly represented in Scripture as anxiously "waiting to be gracious," as intensely desiring to bless. But phenomena everywhere, in the realm of consciousness as elsewhere,

are determined by conditions as well as forces. Now, the necessary condition of blessing in this case is the free-will and the heart of man in accordance with Divine law. But, so far from this necessary condition being present, there is an opposing condition, viz., the law of selfism. Now, it is impossible (I speak it with reverence) for God to overbear by force the free-will of man; it is impossible for Him to violate this condition, without destroying the essential nature of man as a moral being, and thus destroying the possibility of holiness, which is the very end to be attained. see, then, the state of things; the Divine will full of blessings, pressing upon the human heart, and the opposing condition of selfism. Now, prayer—the closing of the closet-door, the bended knee, the upturned eye, and the uplifted heart, and words borne upward on the wings of pure desire-prayer removes the opposing condition, arranges the favoring conditions, and the blessing flows in, not against law, but according to law-a law of the Divine nature, and of our nature.

(b.) The efficacy of prayer in the realm of humanity; prayer for spiritual blessings on our fellowmen, and especially on our loved ones.

We have already seen that spiritual blessings are conditioned upon the free-will of man accepting. This condition cannot be violated. Now, we, by influence, by persuasion, determine the conduct of our fellowmen without violating their free-will. May not God, then, in answer to our earnest prayers, draw, move the hearts of our friends, and thus influence, persuade them to right conduct and holy life, without violating free-

will? I believe He may, and does; the relation of the Spirit of God and the spirit of man is undoubtedly very close, and the influence of one on the other very direct, though inscrutable to us. But, my friends, we cannot expect this, unless we also, by our activity, cooperate.

We have said, spiritual blessings commence within, in the realm of consciousness, and then diffuse themselves outwardly by holy activity. Spiritual life is first quickened within us by prayer. But all true life is active; activity is the sign and test of life. In proportion as we pray for our fellow-men, in the same proportion is our spiritual life quickened, our hearts warmed with intenser love for them, and intenser desire for their welfare, and in the same proportion is our activity for their spiritual welfare increased.

Thus, then, the natural order of events is, first, a spiritual life quickened within ourselves by prayer, by a law not difficult to understand; then this spiritual life, by a law also easy to understand, exhibits itself by holy living, holy activity, holy influence upon our fellows. There is, doubtless, more than this: there is, undoubtedly, a cooperating Divine agency which we cannot understand; but this much, at least, is clear and intelligible, and, what is more, it is thoroughly practical.

(c.) Efficacy of prayer in the realm of external Nature; prayer for material blessings within reach of our activity; for life, health, happiness, and success in legitimate work.

The efficacy of prayer here is explicable on precisely the same principle as the last. Prayer quickens and strengthens all our higher life, and, through them, acts even on our lower nature; it purifies and warms the heart, it quickens the mind, clears the judgment to see the truth, strengthens the will to do the right, and thus fits for the more perfect performance of every duty of life. It tends thus to temperance, and health, and happiness, and success in every legitimate sphere of activity. Therefore, daily prayer for light, for guidance, for strength to perform daily duties, is thoroughly rational, and is always blessed. There may be more than this—there may also be more direct Divine agency which we do not understand—but this much is clear and intelligible.

(d.) Efficacy of prayer in the realm of Nature beyond the reach of our activity.

There is much, very much of Nature which is beyond the reach of our activity, which we are powerless to modify in the slightest degree. Such are the celestial motions, such are meteorological phenomena, sunshine and shower, tempest and lightning, floods and drought; such are geological phenomena, volcanoes and earthquakes. These phenomena are often the cause to us of distress, anguish, terror, of loss and danger. when we lie helpless and distressed, beneath the power of Nature, can earnest prayer of holy men call in the aid of Omnipotence? can it move the arm of the Almighty and change the course of Nature? We, too, in our little sphere of activity, can modify the phenomena of Nature. As the human father, then, will modify the phenomena of Nature at the earnest desire of a loved child, will not also He, our heavenly Father, modify the phenomena of Nature when we, his children, are powerless, and in peril, and cry to Him for help? My friends, it may be so, but we cannot, must not expect it. That He can do so, no one will doubt; but, that He will, we ought not to expect, for the following reasons:

His purposes are infinitely grand, embracing the whole universe and infinite time, and especially the whole human race. The whole cosmos is a complex unit. Every event is a part of this unit, and therefore affects the whole. Shall, then, our individual material wants change the grand purposes of Deity, which include the whole cosmos?

But there is a better reason why we should not expect it. The invariability of the laws of Nature, the uniformity of sequence of events under certain conditions, the absolute reign of law, are the necessary condition of human life and human activity. All our intelligent contrivance, all intelligent activity of all kinds, all our science, culture, civilization, progress, are conditioned on absolute, undoubting faith in this: unsettle our faith in this, and to the same extent you paralyze our intelligent activity; destroy our faith in this, and we return to barbarism and mere animal life. Human intelligence arranging conditions, and thus modifying phenomena in the midst of invariable law-such are the conditions of all culture and progress. Now, the frequent interference of an unseen superhuman agency in the course of Nature would tend to paralyze our intelligent activity, and thus jeopardize the highest interests of the race.1 Shall our individual material wants thus imperil the highest interests of humanity? Are

¹ The good sense of the religious world has always recognized this in every department of Nature, where our knowledge is sufficiently perfect to predict phenomena. It is only the imperfect

we alone his children, are not all men our brethren? Shall He not care for these also? Shall not the interests of the race be his care even more than our personal material interests? I repeat, therefore, we cannot, must not, ought not expect it.¹

Again, the spiritual interests of all men are the same—they cannot clash; but the material wants of men are as diverse as their conditions. The blessing of one is often the curse of another. Hence the most opposite prayers on such subjects ascend to the ear of God. My friends, I again repeat, still more emphatically, we cannot, ought not, must not expect interference in external Nature.

Must we not pray for these things, then? My Christian friends, I cannot say, No. If we were all strong and calm and wise, if we could appreciate the transcendant importance of spiritual blessings and the insignificance of material blessings in comparison, I

recognition of the reign of invariable law which makes it different in some other departments.

¹ This does not in the least affect the question of miracles or the occasional interference when the highest interests of humanity require it. All will admit that the frequent occurrence of miraculous agency cannot be expected, and is in fact inconsistent with the highest interests of mankind. Some writers try to make a distinction between miracles and special providences; in the one, events being determined in violation of law, or else by unknown laws and forces; while in the other they are determined by the use of recognized laws and forces. They say, if man arranges conditions and determines events without violating any law, much more may God do so. But it is evident that the essence of the miraculous consists in the unseen superhuman agency, whether in arranging conditions or in overbearing law. The distinction at once vanishes when we attempt to apply it to regular phenomena like celestial motion.

might, perhaps, answer, No. But, when I remember our weakness, our darkness, our ignorance, I cannot, I dare not say No.

Prayer is the outpouring of every right affection and desire into the ear of our heavenly Father. we repress these because they may be unwise? think not. We human fathers love to hear our children express every right desire to us, even though, through ignorance or weakness, they may be unwise and cannot be granted. It is only thus that the heart of father and child are brought into communion; it is only thus that the will of the child is brought in accordance with the will of the father, and the child is morally trained. Even so, we little children of our heavenly Father know not always what to ask for. ignorance, in our weakness, in our anguish, we may often ask unwisely; but, if our desires are not unholy, He will listen with patience and love. He encourages us to ask, He loves us to ask. Let us, then, ask without fear. Let us express to Him every right desire and feeling, wise and unwise, not only our spiritual yearnings, but our sorrows, our fears, our anguish, of every kind. Our desires may be unwise, our fears and anguish may be childish, but the expression of them is always wise. Indeed, what are we, but "infants crying in the night, infants crying for the light?" and often our "only language is a cry." Let us, indeed, strive to desire wisely, and thus to ask wisely, but, at any rate, let us not hesitate to ask. If we are refused, we will yet be blessed a thousand-fold with his love. The true spirit of prayer is always blessed, and therefore always wise.

"Refused!" some will exclaim; "is not the prayer of faith always answered?" Yes, but what is the praver of faith? Is confident expectation that our desires, our will, whatever it may be, will be accomplished—is this the prayer of faith? Is it not rather the prayer of presumption? The prayer of faith for external blessings is always conditioned upon the "If it be thy will." "Thy will, not Divine will. mine, be done." The prayer of faith is the simple confidence that He will accomplish our real good. prayer makes his will our will, and thus in the true prayer of faith is our will also done. His will is always that all things shall work together for our good, and thus is our highest good accomplished. prayer trains our moral nature, gradually brings our will in accordance with his will, which is the true goal of all our strivings.

But there is at least one realm where our prayers are always answered; yes, our very desires are accomplished: it is the inner realm of consciousness. This is the home of secret prayer and of spiritual life. The light generated here radiates, and vivifies all upon which it falls; the life quickened here goes outward, and blesses all with which it comes in contact. Here the earnest prayer for spiritual blessing is immediately fulfilled. Here we need not even condition our desires with an if, we need not say if it be thy will, for we already know that it is his will to bless. Only, let our desires be true and earnest, and they are already accomplished. The will of God flowing through all revelation, through the course of Nature and Providence, through Scripture and Christ, like a mighty

